MC0019

NHS Estates

An Executive Agency of the Department of Health

Health Technical Memorandum — Building components

Sanitary assemblies 64

725.
51
GRE

30102 00647816 6

1995
Editio

Digitized by the Internet Archive
in 2025 with funding from
UCL Library Special Collections

https://archive.org/details/ucl_mc0019

LONDON SOUTH BANK
SITY LIBRARY

Health Technical Memorandum Building components

Sanitary assemblies 64

LONDON SOUTH BANK
UNIVERSITY LIBRARY
WITHDRAWN FROM STOCK

LONDON SOUTH BANK
UNIVERSITY LIBRARY
WITHDRAWN FROM STOCK

London: HMSO

1995 Edition

© Crown copyright 1989
First published 1989
Applications for reproduction should be made to
HMSO's Copyright Unit.
ISBN 0 11 321243 7

Revised & updated
2nd Edition
First published 1995
ISBN 0 11 321762 5

Contents

1 Introduction

1.1 Background

1.2 Scope and status

1.3 Relationship to other data

1.4 Terminology

2 Design and specification notes

2.1 User requirements

2.2 Soil assemblies

2.2.1 Relationship between appliances and fittings

2.2.2 Disposal units

2.2.3 Urinals

2.2.4 WCs

2.3 Waste appliances

2.3.1 Relationship between appliances and fittings

2.3.2 Basins

2.3.3 Baths

2.3.4 Bidets

2.3.5 Floor outlets

2.3.6 Plaster sinks

2.3.7 Scrub-up troughs

2.3.8 Showers

2.3.9 Sinks and Sinktops

2.3.10 Overflows

2.4 Supply fittings

2.4.1 Source of supply

2.4.2 Water conservation

2.4.3 Water treatment

2.4.4 Pipework

2.4.5 Water pressure

2.4.6 Water temperature

a) Manual control

b) Individual thermostatic control

c) Centralised thermostatic control

2.4.7 Water delivery
2.4.8 Positioning supply fittings
2.4.9 Backsiphonage
2.5 Waste fittings
2.6 Special requirements
2.7 Accessories
2.8 Cleaning and disinfection
2.9 Maintenance and replacement
2.10 Concealed services
2.11 Bacterial growth

3 Product selection criteria

3.1 Introduction
3.2 Component data sheets
3.3 Assembly data sheets

4 Project documentation

4.1 Scheduling
4.2 Product data
4.3 Bills of quantities

5 Site practice

5.1 Ordering and storage
5.2 Fixing and protection
5.3 Preparation for handover

References

Other publications in this series

About NHS Estates

SOUTH BANK UNIVERSITY
CLASS No. 725.51 GRE
DATE W 95
ACC. No. 647816 6.
L.

1 Introduction

1.1 Background

This is one of a series of *Health Technical Memoranda* which provide specification and design guidance on building components for health buildings which are not adequately covered by current British Standards.

The series supersedes all Component Data Base Mk.3 (and earlier Manufacturers Data Base) information.

The numbers and titles of the HTM in the series are:

54 Building components and user manual
55 Windows
56 Partitions
57 Internal glazing
58 Internal doorsets
59 Ironmongery
60 Ceilings
61 Flooring
62 Demountable storage system
63 Fitted storage system
64 Sanitary assemblies
65 Signs
66 Cubicle curtain track
67 Laboratory fitting out systems
68 Duct and panel assemblies
69 Protection
70 Fixings
71 Materials management modular storage

The technical information in this series is the result of research and development funded by the Department as part of collaborative working arrangements over a number of years between the Department, the NHS, and Industry.

HTM64 was prepared in April 1984 and revised in October 1988 when it was published by the HMSO on behalf of the Department of Health.

This revised version incorporates feedback, additional information and changes to sanitary ware and assemblies which have taken place up to the end of March 1994.

Any enquiries regarding the technical content of this HTM should be directed to:

The Manager, HTM Building Components, c/o ESE, 5th Floor, Churchgate House, 56 Oxford Road, Manchester M60 7BL.

1.2 Scope and status

This HTM contains guidance to assist the design team in the selection, specification and application of sanitary assemblies in health buildings.

It does not diminish the manufacturers responsibility for supplying goods fit for purpose nor the design team's responsibility for selecting assemblies to meet project requirements.

1.3 Relationship to other data

The main sources of data used in the preparation of this HTM are listed in the References section.

This HTM was prepared in 1984, revised and first published by HMSO in October 1988 and this 2nd edition is based on data current at March 1994. Readers should ensure they use the latest edition of all building legislation, British Standards, Health and Safety Regulations, etc. and give first preference to products and services from sources which have been registered under a Quality Assurance procedure.

Suppliers offering products other than to British Standards should provide test evidence to show their products are at least equal to such Standards.

This HTM is intended to be read in conjunction with HTM's 27 - Cold water supply: storage and mains distribution and 2040 - The control of Legionellae in healthcare premises in addition to HTM's 56, 62, 63, 67, 68 and 70 in this series.

HTM 68 details duct and panel assemblies to provide concealed and ducted services to sanitary assemblies. The design team should make reference to this HTM and give early consideration to sourcing sanitary assemblies and duct panels for their project: some manufacturers offer complete pre-assembled units based on HTM data.

1.4 Terminology

Throughout this HTM the following definitions apply:

Soil appliance
An appliance for the reception and discharge of excretory matter.

Waste appliance
An appliance for the reception of water for ablutionary, cleansing, or culinary purposes and its discharge after use.

Supply fitting
A fitting to control or regulate the supply of water, commonly used with an appliance.

Waste fitting
A fitting to conduct the discharge from an appliance and to connect to pipework.

Sanitary assembly
An assembly comprising a soil or waste appliance and appropriate supply and waste fittings.

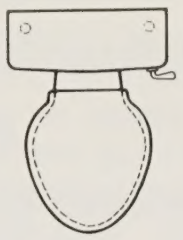
Hospital pattern
For use by patients, and by medical and nursing staff in connection with medical and nursing procedures.

General pattern
For use by hospital staff and the public in general, ie non-medical/nursing, areas; or for use in residential accommodation.

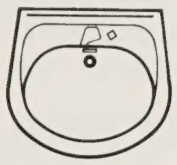
Handing

Handing of an appliance is determined from the front of the appliance:

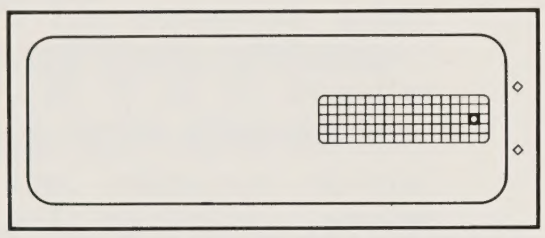
Right hand flushing lever



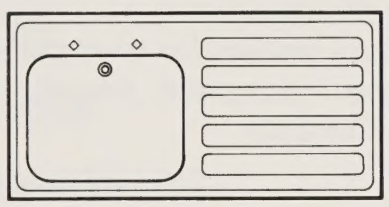
Right hand tap hole



Right hand bath



Right hand drainer



2 Design and specification notes

2.1 User requirements

The design team should identify user requirements for sanitary assemblies from the Activity Data Base (ADB) and then use the data sheets in Section 3 of this HTM to identify appropriate assemblies.

Ergonomic Data Base sheets relevant to sanitary assemblies are contained in a number of Health Building Notes in particular HBN40, Common Activity Spaces, Volume 1: "Examples, Common Components" and in Volume 4: "Designing for Disabled People" published by HMSO for the DoH. Those should be read in conjunction with the data sheets in this HTM, with relevant Activity Data Base sheets and with appropriate manufacturers' product information.

2.2 Soil assemblies

2.2.1 Relationship between appliances and fittings

The relationship between soil appliances and fittings which make up the complete assembly is critical. Therefore, disposal units, urinals and WCs must be treated as assemblies for the purposes of design, specification, procurement and installation.

2.2.2 Disposal units

A hospital pattern disposal unit should be provided in medical/nursing areas for disposal of solid and liquid waste, small dressings, and the contents of vomit bowls, drainage bags and urine bottles. The unit can also act as a standby in the event of the failure of a bed pan disposal unit (macerator) (see page 10).

A general disposal unit should be provided in other areas for disposal of liquid and solid waste.

Both units require a soil connection to the drain and a flushing cistern.

If services are to be surface mounted an exposed pattern ceramic cistern should be specified.

In operating theatres there may be the periodic need for disposal of plaster waste. For situations where space may be limited a dual purpose disposal unit has been developed DU P H. This would serve as a bucket sink for liquid waste in addition to plaster waste disposal.

Domestic services disposal units may have semi-circular or square fronts. A more economic manufacture in stainless steel can be achieved using the square fronted pattern which is illustrated but the semi circular pattern would be equally acceptalbe.

2.2.3 Urinals

Bowl urinals are more hygienic and easier to install than slabs.

Assemblies of 1, 2 and 3 bowls are available in two forms, the hospital pattern assembly with concealed services and cistern, and the general pattern assembly with exposed services and cistern. Divisions are available for use with multiple urinals.

2.2.4 WCs

Hospital pattern WCs should have wash down pans and be of the 'back-to-wall' type with concealed cistern and services. Adult and child versions are available.

They should be suitable for use with sanitary/ wheel chairs, and this will involve co-ordinating the dimensions of chairs with those of WC assemblies and any necessary adjustment to the location of the WC in relation to the wall behind it, or to the height from floor level, to facilitate transfer of patients to and from the chair.

The Building Regulations require appropriate provision of WC facilities for the disabled: consideration will be required for suitable provision of such facilities in general areas where they may be used by visitors.

For further information refer to:

HBN40 Common Activity Spaces and
BS 4751 Sanitary wheel chairs
Building Regulations Approved Document Part M

General pattern WC's have low level exposed cisterns with wash down pans. Double trap siphonic pans should not be used as they do not function with reduced capacity cisterns now required.

Corbelled WC pans have numerous advantages including the ability to set them at a height to suit the disabled: they are particularly suitable for use in conjunction with pre-assembled panels and avoid all disruption of the floor finish. They can be supported on metal support frames set in a duct or bolted to a suitably framed back panel.

In some situations, such as in prison hospitals and psychiatric care premises, it may be necessary to specilfy stainless steel WC pans to resist vandalism.

All pans should have a horizontal or P-outlet so that the soil pipe can be connected above floor level. This gives flexibility in setting out pans and pipework and allows access to the joint for both installation and maintenance. A variety of WC connectors are available which can accommodate different configurations between the outlet and the soil pipe (see BS 5627 for WC connectors).

In the case of back-to-wall type pans suitable access must be provided to allow the fitting of the WC connector to be carried out properly. This can be provided either from the rear within a duct or by access panels on the room side.

Overflow warning pipes should be provided and located where the discharge will be apparent to users.

2.3 Waste appliances

2.3.1 Relationship between appliances and fittings

Waste appliances may be dealt with as separate items as the relationship between the appliance and its fittings is less critical than for soil assemblies.

However, certain combinations of appliances and supply fittings are recommended and are illustrated on assembly data sheets on pages 57 to 70.

2.3.2 Basins

Basins should have a smooth form and easily cleaned surfaces. Overflows are not provided as they are unhygienic.

Three sizes of basin will fulfil most of the user requirements in health buildings:

- Large basins:

for use in medical/nursing areas for 'scrub-up' purposes, and for use by seated or wheelchair patients, for which wide shallow basins should be selected.

- Medium basins:

for use in medical/nursing procedures and in general areas/domestic services.

- Small basins:

for use in WC cubicles, food preparation areas and similar locations. Suitable only for hand rinsing.

Basins without tap holes should be used in medical/nursing procedures with wall mounted lever action/proximity sensor taps with concealed/ducted services. Washing is normally under running water and therefore a flush grated waste with no plug is required. This assembly maintains hygiene conditions required in clinical areas.

Basins with/without taps holes should be used for general areas/domestic services preferably with wall mounted rotating/lever action taps with concealed/ducted services. Washing is normally in a reservoir of water, therefore a bowl with plug is required. Provision of concealed/ducted services is not an essential requirement for hygiene for this assembly for use in non clinical areas hence the option of tap holes.

Basins are not always face fixed to walls or ducts and two alternative options exist.

Semi-recessed basins are partially inset into a boxed duct assembly/vanity unit which could be combined with a WC and/or bidet. This assembly would not be suitable for wheelchair users.

Inset basins are usually self rimming for use in counter tops. This type of assembly is not generally recommended for healthcare premises other than staff residences as it can be difficult to maintain standards of hygiene. However one piece assemblies in materials such as cast resins, stainless steel, solid surfacing materials or vitreous china have many advantages and are to be preferred.

Where medium or small basins are selected with monobloc pillar taps (such as disc type) the basin must be specified with single tap hole **35 mm diameter**.

When selecting taps for medical/nursing procedures, and certain activities in food preparation and laboratory areas, supply fittings will be required which can be operated without the use of hands. Fittings actuated by a proximity sensor are now an alternative to lever action taps.

The design team should select the appropriate combinations of basins and taps illustrated on the assembly data sheets for:

- medical/nursing procedures (page 60)
- personal washing (page 61)
- seated users (page 62)
- hand rinsing (page 63)

2.3.3 Baths

Hospital pattern baths have near vertical sides and flat bottoms to contain a generous volume of water. They have no tap holes and should be used with wall mounted taps. Panels and plinths should be detailed as builders work.

Baths for assisted bathing should be installed to allow access from both sides and at one end by a mechanical hoist. In such situations baths may be subject to impact damage and suitably robust material should therefore be specified.

A recommended assembly of an assisted bath is illustrated on page 64.

A bath assembly for use by patients and/or staff for personal bathing is shown on page 65.

Mechanically operated variable height baths can be used to permit either assisted or personal bathing.

2.3.4 Bidets

Bidets are generally used by patients in medical/nursing areas. The appliance should be rimless without plug or tap holes. A wall mounted hand spray should be provided mounted centrally and the water supply must be controlled by a thermostatic mixer valve to prevent scalding.

It is recommended that a notice explaining the use of the mixer valve be sited adjacent and this is shown in the revised assembly data sheet.

Spacers are available to increase the projection of bidets from the wall face behind to make them suitable for hospital use, and the appropriate means of preventing back siphonage must be provided to comply with the water bye-laws.

The revised data sheet assembly shown on page 66 addresses the problem of back siphonage and problems associated with delay between opening the valve and the start of water flow.

In addition a general purpose bidet assembly has been introduced; it includes fixed over-rim supply fitting which may incorporate a remote lever action pop-up plug.

2.3.5 Floor outlets

The general pattern floor outlet consists of a drainage outlet and grating with wall mounted taps

and a flexible hose. It is used for the disposal of the contents of floor washing machines etc.

The hospital pattern floor outlet consists of a drainage outlet covered by a small grating. It is intended mainly for use in showers in medical/nursing areas. The floor should be dressed into the flange of the grating.

2.3.6 Plaster sinks

Plaster sinks in medical/nursing areas have a lift out strainer basket and wall mounted taps.

A plaster sink assembly is illustrated on page 67 and a combined plaster/domestic services bucket sink on page 58. Refer to paragraph 2.2.2 for its particular use.

2.3.7 Scrub-up troughs

Scrub-up troughs should be provided to enable one or more surgeons and nurses to scrub their hands and forearms

Troughs should be wall hung and fitted with a single waste outlet. Taps should be wall mounted.

A scrub-up trough assembly is illustrated on page 68, which has been amended for this revised edition.

Some confusion has occurred in the past between the information in this HTM and that in ADB material. The critical relationship of the rim of the trough to the point of supply of temperature controlled water is now indicated on the assembly data sheet.

Proximity sensor switches are ideally suited to control the flow of water at scrub up troughs.

2.3.8 Showers

Showers in medical/nursing areas should be provided in shower rooms with wheelchair access. The floor should be laid to falls to a waste outlet set into the floor. Supply fittings should be wall mounted.

Flexible connections to hand held shower heads should be provided and the design of the unit should be such that the head cannot become immersed in water.

Shower controls should be positioned so as to allow manipulation without the operator getting wet.

Showers in medical/nursing areas should be thermostatically controlled with a failsafe mechanism to prevent scalding should the cold water supply fail.

Showers in general areas for use by staff should be provided by shower trays with wall mounted supply fittings.

Deluge showers required for health and safety purposes should not be installed at the end of pipelines and should be flushed out weekly. Such installations should comply with the recommendations of HTM2040 - The Control of Legionella in Health Premises. Details of supply fittings and assemblies are not covered by this HTM and advice should be sought from specialists/manufacturers.

Where filters are provided the recommended maintenance procedures should be followed.

2.3.9 Sinks and sinktops

A range of single bowl and double bowl sinks with or without integral drainers and/or worktops are available. They should have a smooth form and easily cleaned surfaces. Overflows are not provided as they are unhygienic. They are available in various sizes and materials to suit the requirements of this HTM and the specific dimensional requirements of HTM62 Demountable storage systems, HTM63 fitted storage systems and HTM67 laboratory fitting out systems. Sinks with integral tops are available in a variety of materials as well as stainless steel and the appropriate material should be selected to reflect the intended use. HTM67 offers further guidance on selection of materials.

Sinks or sink tops without tap holes should be used in medical/nursing procedures with wall mounted lever action/proximity sensor taps with concealed/ducted services. Washing is normally under running water and therefore a flush grated waste with no plug is required. This assembly maintains hygiene conditions required in clinical areas.

Sinks or sink tops with/without tap holes should be used for general use/domestic services preferably with wall mounted rotating/lever action taps with concealed/ducted services. Washing is normally in a reservoir of water, therefore a sink with a plug is required. Provision of concealed/ducted services is not an essential requirement for hygiene for this assembly for use in non clinical areas hence the option of tap holes

The design team should select the appropriate combination of sink integral drainer or worktop and taps illustrated on the assembly data sheets for:

medical/nursing procedures page 69

general use/domestic services page 70

2.3.10 Overflows

Overflows to sinks, basins, baths and bidets are not recommended as they constitute a constant hygiene risk much more significant than the possible risk of damage due to water overflowing. Most of the components in this HTM are specified with no waste plug: in situations where a waste plug is required - such as in some sinks - a standing waste which incorporates an overflow may be used. This recommendation does not apply to staff residential accommodation.

2.4 Supply fittings

2.4.1 Source of supply

All installations must comply with the statutory regulations framed to avoid the risk of contamination of the mains water supply. The principal requirement is to ensure that no sanitary assembly in a health building is connected directly to the mains water supply. In residential buildings the regulations require a direct connection to the

rising main of one tap for drinking water - normally that to the kitchen sink.

For further information see HTM27: Cold water supply, storage and mains distribution and the Water Supply Byelaws Guide published by the Water Research Council.

2.4.2 Water conservation

The need to conserve water should always be considered when selecting sanitary assemblies and supply fittings.

Considerable savings of both hot and cold water can be made by specifying showers rather than baths and spray taps for hand rinsing.

2.4.3 Water treatment

Water softening treatment should be provided and maintained regularly in hard water areas.

2.4.4 Pipework

Pipework should be planned to avoid dead legs which are wasteful of heat and can cause corrosion of pipes and fittings by allowing sediment to be deposited.

Stop valves should be provided to isolate each individual appliance.

Pipe clips on exposed pipework should be specified and installed to avoid injury to staff and patients from sharp edges or the like.

2.4.5 Water pressure

As far as possible the engineering services installation should be designed to ensure minimum pressure differential between hot and cold water supply pipes at the point of connecting the control fitting; this will improve the performance of sanitary assemblies and can avoid the use of expensive supply fittings. Some supply fittings - especially those of continental design/manufacture - are designed for use at high pressures and the design team should make their selection accordingly. Balanced pressures whether high or low - are still very desirable at the point of supply.

2.4.6 Water temperature

The water temperature at point of delivery should be controlled by one of the methods described below as appropriate to user requirements:

Provided certain requirements are met, (notably that hot and cold pressures are balanced and that the hot water supply is fed from a cistern which complies with Water Byelaw 30) water regulations permit blending within the supply fitting of hot water with cold direct form the main.

Where the requirements cannot be met, the supply fittings must separate hot and cold water up to the point of discharge. An annular flow outlet is to be preferred as it reduces the risk of scalding.

a) Manual control

Separate hot and cold water taps or valves controlled manually by the user.

b) Individual thermostatic control

Thermostatic mixing of hot and cold water by a valve at a fitting. The maximum water temperature required may be set and locked on the valve.

c) Centralised thermostatic control

A thermostatic control valve may be fitted as part of the engineering services installation to limit the temperature at which heated water is distributed. Valves may be sited to cover the supply to a department or to a range of fittings This form of installation allows the use of on/off manual control at the appliance served.

The design team should refer to HTM2040 and the problems of safety, particularly the risk of scalding young children and the elderly/infirm.

An NHS Estates guidance document on temperature of hot water and its distribution in health buildings is in course of preparation.

To reduce the risk of an outbreak of Legionnaires disease occurring, cold water should be stored and distributed at a temperature below 20°C and hot water should be stored at a temperature of 60°C and distribution controlled at a temperature of 52°C (±2°C control tolerance).

The safety of some children and elderly people can be compromised if they are allowed unsupervised use of bathing facilities supplied with water at this temperature. This risk can be reduced by the installation at each bath and shower outlet of locally adjustable thermostatic mixing valves, preset and locked to provide a blended water temperature not exceeding 43°C. These mixing valves should be of a type unaffected by changes in water pressure and should fail safe i.e. automatically close the hot water supply if the cold water supply fails. Vigilance will still be required to ensure that vulnerable patients using wash basins or sinks are not in prolonged contact with water at a temperature which could be marginally in excess of 52°C.

2.4.7 Water delivery

The control of water delivery at point of use - on/off and hot/cold - may be achieved in several ways and in several different combinations.

New fittings are now available in which the flow of water is initiated and terminated by means of a proximity sensor switch. Such devices may well have considerable application in high risk areas such as operating theatres and burns units; they can also be effective in reducing water waste.

Other new fittings are now available in which the flow of water is initiated and terminated by one lever operation in a vertical direction. The same lever operated to the left or right adjusts the temperature of the water from cold to hot with warm water at the central position. These fittings are pillar style taps with 'Euro-disc' type compound action and are suitable for use on basins and sinks. A new component data sheet for TP8 and TP9 has been prepared for these fittings.

Supply fittings are more normally controlled by hand manipulation of a tap head which may be cross pattern, moulded, press down shroud or a lever. Control can also be initiated by foot or knee pressure in certain types of fittings.

The supply fittings shown on the data sheets should fulfil most of the requirements of health buildings.

Toggle action taps are not recommended as they carry a risk of injury by people bending over a basin.

2.4.8 Positioning supply fittings

In all surgical areas and, where practical, in medical/nursing areas supply fittings should be fixed on the wall or on a backing panel to facilitate installation, cleaning and maintenance of the appliance.

2.4.9 Backsiphonage

Water bye-laws require that supply fittings on baths, basins and sinks etc. shall be arranged so that discharge takes place at least 25mm above the spill-over level of the appliance.

When flexible pipes with hand-held spray attachments are used with these fittings, special measures must be taken to prevent backsiphonage.

A number of solutions are available including the use of break tanks.

2.5 Waste fittings

The waste fittings included in this HTM are outlets and traps. They have been illustrated and specified separately as individual components on the component data sheets (see 3.2) so that the appropriate fitting for the appliance can be selected. In some instances they are specified on the appliance data sheet and on the assembly sheets.

All outlets are unslotted for use with appliances without overflows. There are two types, one with a flush grating and the other with a recessed grating, plug, chain and stay. Plugs are only required where it is necessary to retain water in an appliance ie basins for general use, baths and sinks. Where this is not required plugs should be omitted and the flush grating type used.

Bottle traps for use with waste appliances can be either metal or plastic, with a CP finish where exposed or self finished where concealed. Resealing traps should be used generally and always with single stack plumbing.

2.6 Special requirements

This HTM does not cover special requirements such as Asian WCs, variable height baths, autopsy tables and drinking fountains. These should be selected directly from manufacturers product literature.

2.7 Accessories

Accessories such as toilet roll holders, grab rails, mirrors, soap dispensers and towel rails are not included in this HTM and should be specified directly from manufacturers product literature.

2.8 Cleaning and disinfection

Components should be easy to clean. There should be no inaccessible recesses, rough surfaces or projections, sharp edges etc which may retain dirt, snag cleaners' hands or equipment, or be difficult to reach.

Hospital cleaning policies should ensure that care is exercised in cleaning sanitary assemblies, particularly those that are new. Approved cleaning cloths, neutral detergent solutions and cream cleansers only should be used to avoid damaging surfaces. Materials such as scouring powders and abrasive pastes and pads can cause irreparable damage and must be avoided. Abrasive scouring powders can cause considerable damage by removing glaze.

A descaling fluid should be used to remove lime deposits in WCs and other appliances.

The Control of Infection authority should be consulted and their recommendations strictly applied where it is necessary to disinfect baths and other appliances.

Components should be sealed at junctions with floor and walls with a suitable sealant.

Splash backs may be of ceramic tiles, plastic laminate sheet or protective coatings.

2.9 Maintenance and replacement

Planned maintenance of sanitary assemblies should be included in maintenance manuals and programmes to ensure that supply and waste fittings are in full working order.

Some components such as tap and valve washers, flexible hoses and plugs and chains become worn with use. They should be examined regularly and replaced before they affect the operation of the entire assembly.

2.10 Concealed services

In medical/nursing areas pipework and cisterns should always be concealed. This is desirable generally wherever it is practicable.

Exposed services are visually unattractive, can be unhygienic, and are difficult to clean and decorate. Indeed the additional cost of the latter over a number of years may well exceed any savings in initial capital costs.

In all cases the objectives of design and specification should be an installation which is neat, easy to clean and maintain and durable.

Refer to HTM 68 - Duct and panel assemblies.

2.11 Bacterial growth

Components and accessories should not sustain the growth of bacteria. The design team should refer to HTM2040 for guidance on the control of Legionellae and other bacterial.

3 Product selection criteria

3.1 Introduction

The component data sheets and assembly data sheets in this section provide the design teams with a set of product selection criteria in graphic and text form for each of the soil and waste appliances and assemblies covered by the guidance in section 2, and are intended for use in evaluating manufacturers' trade literature, and communicating requirements to manufacturers and to merchants.

The component references on the component data sheets may be used by the design team to identify each appliance when preparing layout drawings, schedules and product lists (see 4.1).

The references are made up in sequence of:

- appliance/fitting
- type
- material (where applicable)

soil appliances

DU	disposal unit
UR	urinal
WC	water closet

waste appliances

LB	lavatory basin
BA	bath
BD	bidet
FO	floor outlet
PS	plaster sink
SU	scrub-up
SH	shower
SK	sink
ST	sink top

supply fittings

TP	pillar tap
TB	bib tap
MM	manual mixer shower
TM	thermostatic mixer shower

waste fittings

WT	waste

traps

TR	trap
TRR	trap resealing

type

H	hospital pattern
HC	hospital pattern corbelled
G	general pattern
GS	general pattern semi recessed
GI	general pattern inset
A	adult
C	child
L	low level
C	close coupled

material

M	metal
P	plastic
C	ceramic
CR	cast resins
SS	solid surfacing materials

3.2 Component Data Sheets

Component Reference	Soil Appliances	Page Number
DU H	Hospital Pattern Disposal Unit	10
DU H S	Hospital Pattern Disposal Unit with Sink	11
DU P H	Hospital Pattern Disposal Unit Plaster/Domestic Services Bucket Sink	12
DU G	Domestic Services Unit	13
UR H/1	Hospital Pattern Urinals-	14
2	Single/Double/Triple Bowl(s)	14
3		14
UR G/ 1	Urinals-Single/Double/Triple	15
2	Bowl(s)	15
3		15
WC H/A	Hospital Pattern WC	16
	- Adult pattern	
WC H/C	Hospital Pattern WC	16
	- Child pattern	
WC HC/A	Hospital Pattern Corbelled WC - Adult pattern	17
WC G/L	Low Level Wash-down WC	18
WC G/C	Close Coupled Wash down WC	19
	Waste Appliances	
LB H/ S	Hospital Pattern Basin -	20
M	Small/Medium/Large	20
L		20
LB G/ S	General Basin -	21
M	Small/Medium/Large	21
L		21
LB GS/S	General Basin semi recessed	22
M	Small/Medium/Large	22
L		22
LB GI/S	General Basin inset	23
M	Small/Medium/Large	23
L		23
BA H/M	Hospital Pattern Metal Bath	24
BA H/P	Hospital Pattern Plastics Bath	25
BA G	General Bath	26
BD H	Hospital Pattern Bidet	27
BD G	General Bidet	28
FO H	Hospital Pattern Floor Outlet	29
FO G	Floor Outlet	30
PS H	Hospital Pattern Plaster Sink	31
SU H/ 1	Hospital Pattern Scrub-up	32
2	Trough	32
3		32

Component Reference	Waste Appliances	Page Number
SH G/P	Plastics Shower Receiver	33
SH G/C	Ceramic Shower Receiver	34
SK/1	Sink - Single Bowl	35
SK/2	Sink - Double Bowl	36
ST/A	Sink Tops - Single Bowl Single Drainer	37
B	Single Bowl and Double Drainer	37
C	Double Bowl and Single Drainer	37

Component Reference	Supply Fittings	Page Number
MM1	Wall Mounted Manual Mixer Shower (with Handset)	48
MM2	Wall Mounted Manual Mixer Shower (Fixed Nozzle)	49
TM1	Wall Mounted Thermostatic Mixer Shower (with Handset)	49

Supply Fittings

TP1	½in (12 mm) Pillar Tap	38
TP2	¾in (18 mm) Pillar Tap	38
TP3	½in (12 mm) Pillar Tap High Neck	39
TP4	Toggle Action tap deleted	-
TP5	½in (12 mm) Pillar Tap Short Lever Action	39
TP6	Pillar Mixer Tap with Spray	40
TP7	Pillar Combination Tap Assembly (Swivel Nozzle)	40
TP8	Pillar Manual Mixer Tap Compound Lever Action with Spray	41
TP9	Pillar Manual Mixer Tap High Neck Compound Lever Action	41
TB1	½in (12 mm) Bib Tap with Hose Union	42
TB2	½in (12 mm) Bib Tap with Hose Union	42
TB3	½in (12 mm) Bib Tap	43
TB4	Bib Combination Tap Assembly (Swivel Nozzle)	43
TB5	½in (12mm) Bib Combination Tap Assembly	44
TB6	¾in (18mm) Bib Combination Tap Assembly	44
TB7	Wall Mounted Manual Mixer Spray	45
TB H1	½in (12 mm) Hospital Pattern Bib Tap	45
TB H2	Hospital Pattern Bib Combination Tap Assembly (Swivel Nozzle)	46
TB H3	Hospital Pattern Bib Combination Tap Assembly (Fixed Nozzle)	46
TB H4	Hospital Pattern Bib Thermostatic Mixer	47
TB H5	Hospital Pattern Bib Manual Mixer	47
TB H6	Hospital Pattern Bib Thermostatic Mixer Automatic Action	48

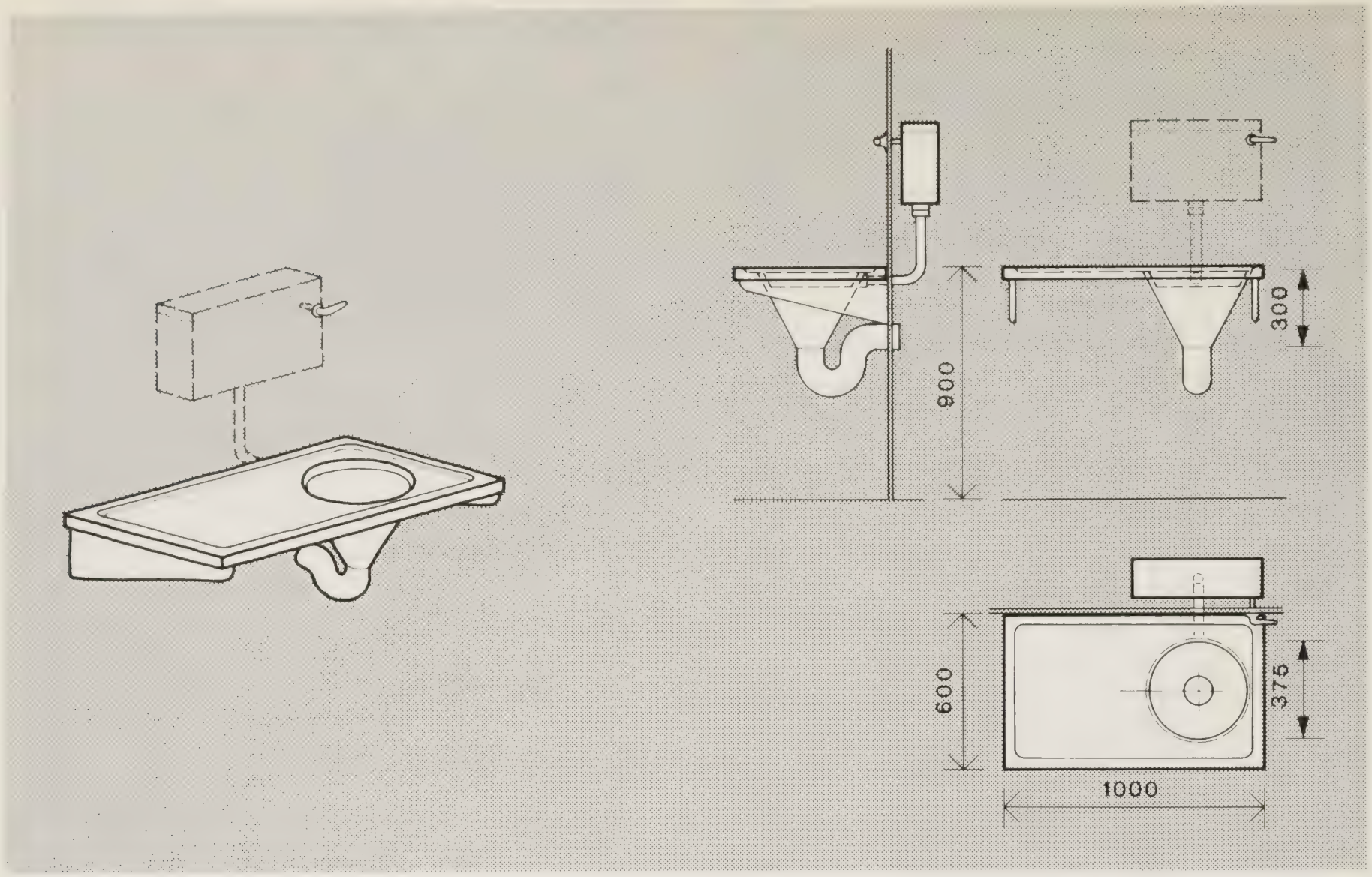
Waste Fittings

WT1	1¼in (32 mm) Flush Grated Waste	50
WT2	1½in (38 mm) Flush Grated Waste	50
WT3	1¼in (32 mm) Waste with Plug and Chain	51
WT4	1½in (38 mm) Waste with Plug and Chain	51

Traps

TR1/M	1¼in (32 mm) Bottle Trap - Metal	52
TR2/M	1½in (38 mm) Bottle Trap - Metal	52
TR R1/M	1¼in (32 mm) Resealing Bottle Trap - Metal	53
TR R2/M	1½in (38 mm) Resealing Bottle Trap - Metal	53
TR 1/P	1¼in (32 mm) Bottle Trap -Plastic	54
TR 2/P	1½in (38 mm) Bottle Trap - Plastic	54
TR R1/P	1¼in (32 mm) Resealing Bottle Trap - Plastic	55
TR R2/P	1½in (38 mm) Resealing Bottle Trap - Plastic	55

DU H Hospital Pattern Disposal Unit



Identification

A stainless steel plain top incorporating a hopper.
Left hand unit (illustrated).

Standards

Stainless steel type 304 SI6:-	BS 1449:Part 2
Copper tube:-	BS 2871:Part 1
Flushing cistern:-	BS 1125
Float operated valves:	
Diaphragm type:-	BS 1212
Floats (plastics) for ball valves:-	BS 2456
Stainless steel tube:-	BS 3605

Description

A plain top of stainless steel (min. 16 swg or where press formed 18 swg) with no tapholes, no upstand, edges rimmed and turned down, underside sound deadened with smooth impermeable easily cleaned material and/or underlined with stainless steel.
The top incorporates a hopper with continuous flushing rim and concealed connection and 'p' trap with 100/110 mm outgo.
A single flush reversible plastics cistern (for mounting in duct) with ½in LP brass valve, plastics float, and metal flushpipe, and CP metal flushing lever handle.
Stainless steel wall mounting brackets.
All exposed stainless steel finished No. 3B; outside of hopper finished bead blast.
Earthing terminal.

Options

Right hand unit.
Stainless steel support frame in lieu of wall brackets.
½in HP brass valve.
Exposed cistern and pipework.
Plastics flush pipe.

Application

For disposal of liquid and solid waste. For use with concealed services: use with wall mounted supply fittings.

Fixing/Installation

Disposal unit mounted on brackets and/or fixings suitable for screw fixing to wall or duct panel.
Provision for screw fixing concealed cistern and pipework.

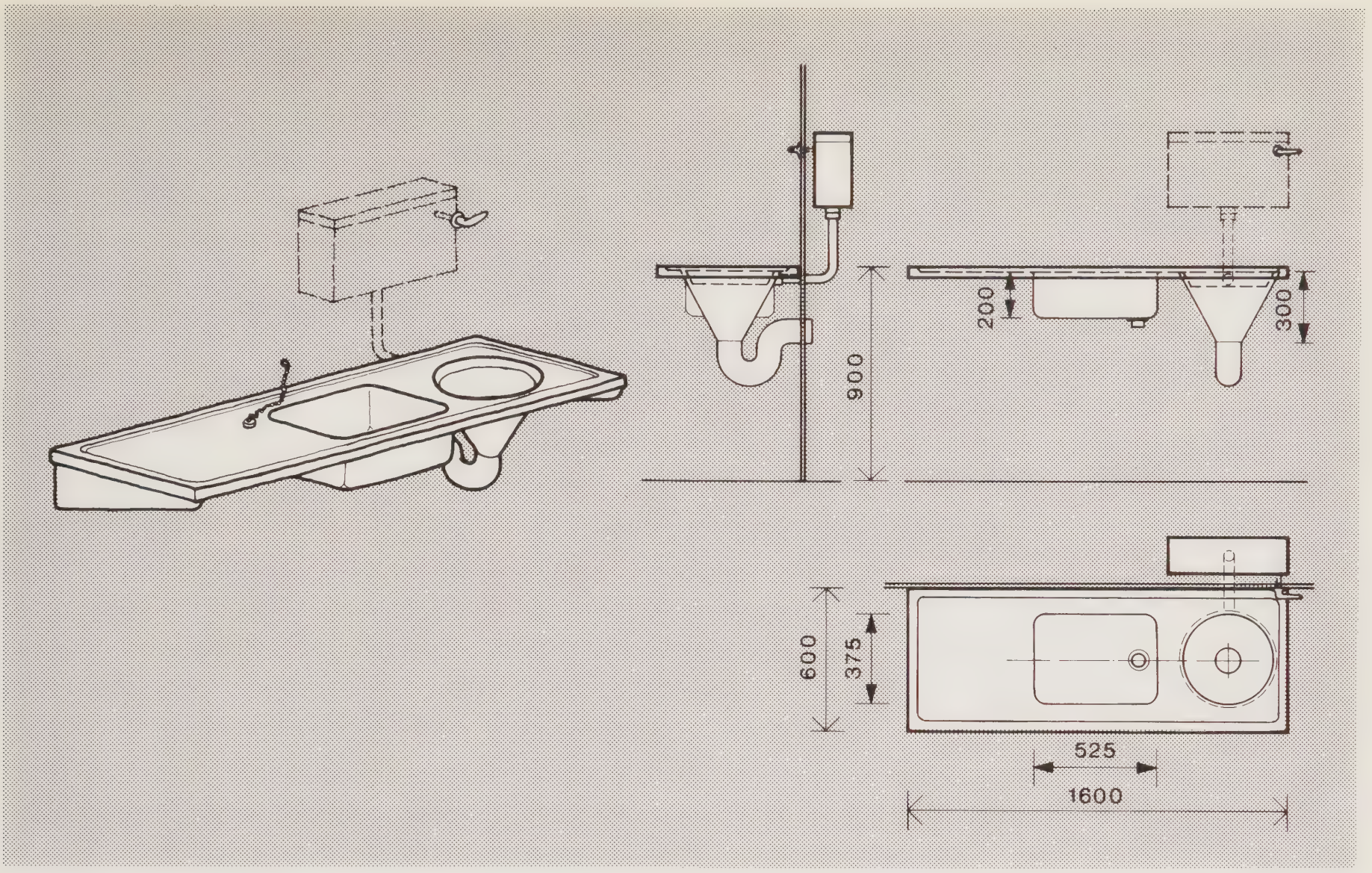
- Make provision for discharge of overflow warning pipe.
- Should only be fed from tanked supply.
- Use HP valve option when connecting to water supply pressure in excess of 1.35 bar.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, no sharp edges.

Front edge profiles may be square as shown or with roll front edge (and with upstand at rear) to suit profile shown in HTM62 and 63. Depth will then be 650.

DU H S Hospital Pattern Disposal Unit with Sink



Identification

A stainless steel plain top incorporating a sink and a hopper. Left hand unit (illustrated).

Standards

Stainless steel type 304 SI6:-	BS 1449:Part 2
Copper tube:-	BS 2871:Part 1
Flushing cistern:-	BS 1125
Float operated valves:	
Diaphragm type:-	BS 1212
Floats (plastics) for ball valves:-	BS 2456
Stainless steel tube:-	BS 3605

Description

A plain top of stainless steel (min. 16 swg or where press formed 18 swg) with no tapholes, no upstand, edges rimmed and turned down. underside sound deadened with smooth impermeable easily cleaned material and/or underlined with stainless steel.

The top incorporates a rectangular sink bowl without overflow and a hopper with continuous flushing rim and concealed connection and 'p' trap with 100/110 mm outgo.

A single flush reversible plastics cistern (for mounting in duct) with ½in LP brass valve, plastics float, and metal flush pipe, and CP metal flushing lever handle.

1½in. (38 mm) unslotted waste (CP on brass) with recessed grate, plug with metal link chain and screw stay.

Stainless steel wall mounting brackets. All exposed stainless steel finished No. 3B; outside of sink and hopper finished bead blast. Earthing terminal.

Options

Right hand unit.

Stainless steel support frame in lieu of wall brackets.

½ in HP brass valve.

Exposed cistern and pipework. Plastics flushpipe.

Application

For disposal of liquid and solid waste. For use with concealed services: use with wall mounted supply fittings.

Fixing/Installation

Disposal unit mounted on brackets and/or fixings suitable for screw fixing to wall or duct panel. Provision for screw fixing concealed cistern and pipework.

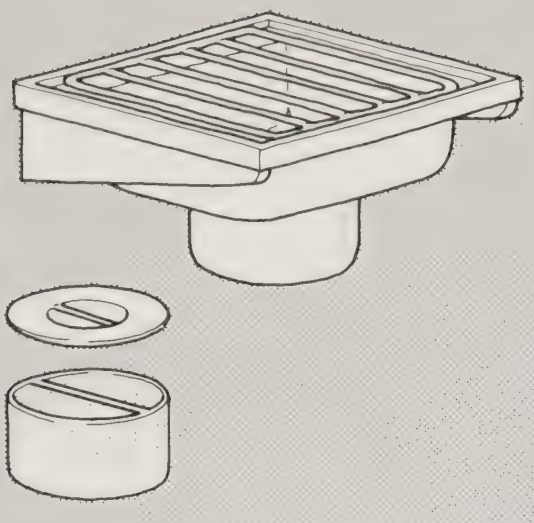
- Make provision for discharge of overflow warning pipe.
- Should only be fed from tanked supply.
- Use HP valve option when connecting to water supply pressure in excess of 1.35 bar.

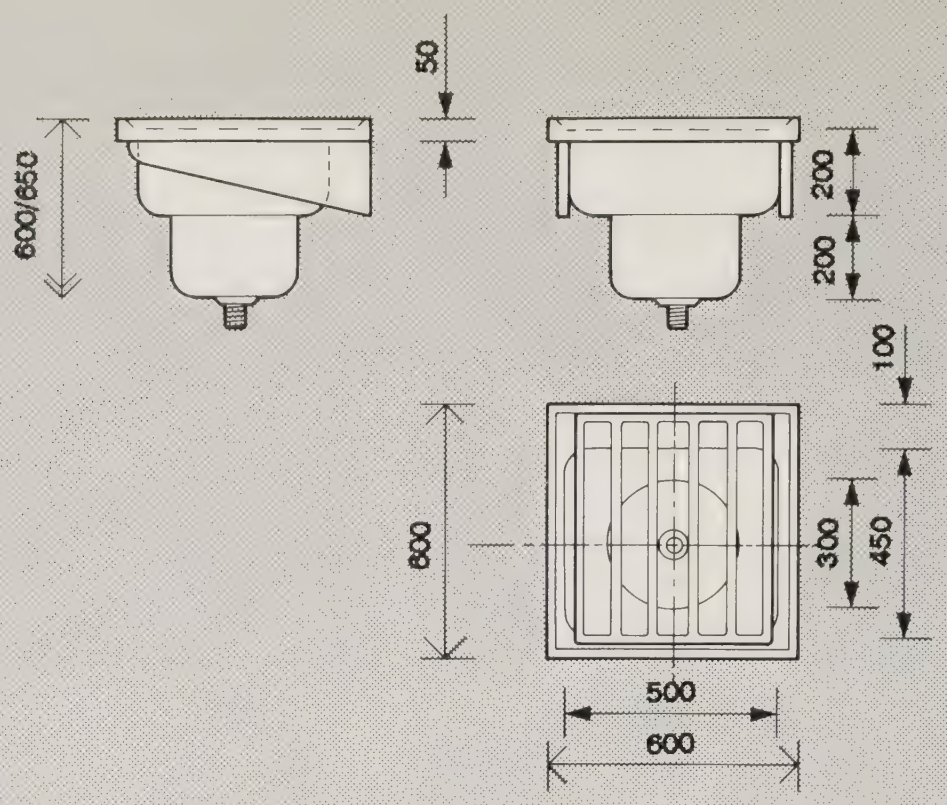
Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, no sharp edges.

Front edge profiles may be square as shown or with roll front edge (and with upstand at rear) to suit profile shown in HTM62 and 63. Depth will then be 650.

DU P H Hospital Pattern Disposal Unit Plaster/Domestic Services Bucket Sink





Identification

Stainless steel bowl with round sump and hinged grid.

Standards

Stainless steel type 304 S16:-	BS 1449: Part 2
Wastes:-	BS 3380

Description

A rectangular stainless steel bowl (min. 16 swg or where press formed 18 swg) with no tapholes, no upstands, no overflow, edges rimmed (min 13 mm high) and turned down, underside sound deadened with smooth impermeable easily cleaned materials and/or underlined with stainless steel. The bowl incorporates a round sump, containing a partially perforated stainless steel basket covered by a close fitting stainless steel cover with recessed handle.
Stainless steel hinged grid.
1½ in (38mm) unslotted flush grated waste (CP on brass). Stainless steel wall mounted brackets. All exposed stainless steel finished No.3B; outside of sink and sump finished bead blast.
Earthing terminal.

Options

Stainless steel support frame in lieu of wall brackets.

Application

For disposal of liquid and plaster waste.
For use with concealed services: use with bib taps.
Suitable for mounting on wall brackets or stand supports.

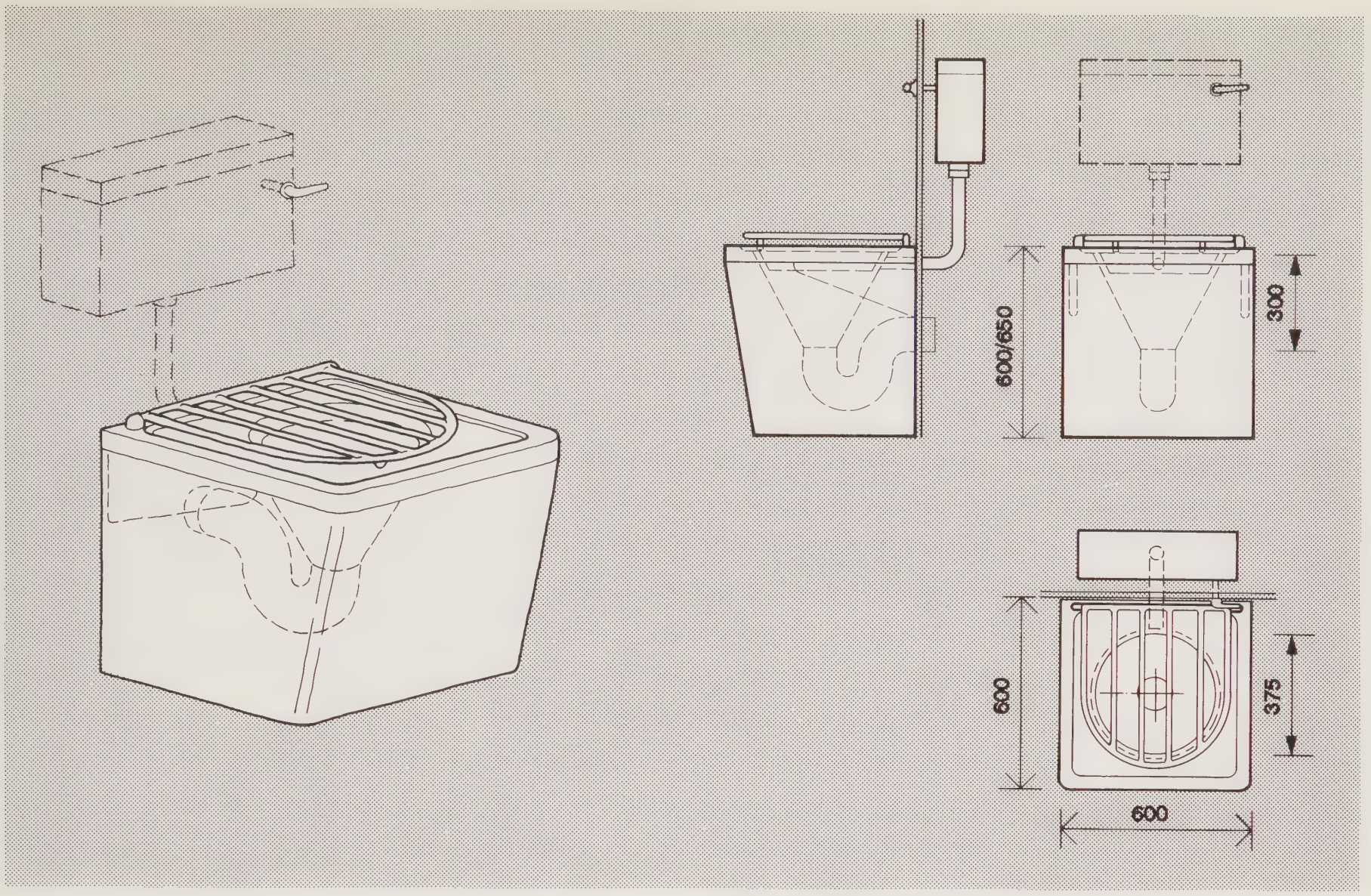
Fixing/Installation

Concealed fixing clips

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, no sharp edges, all internal corners radiused.

DU G Domestic Services Disposal Unit



Identification

A stainless steel hopper with hinged grid.

Standards

Stainless steel type 304 S16:-	BS 1449: Part 2
Copper tube:-	BS 2871: Part 1
Flushing cistern:-	BS 1125
Float operated valves:	
Diaphragm type:-	BS 1212
Floats (plastics) for ball valves:-	BS 2456
Stainless steel tube:-	BS 3605

Description

A stainless steel (min. 16 swg) with no tapholes, no upstand, edges rimmed and turned down and with continuous flushing rim and concealed connection and 'P' trap with 100/110mm outgo: polished brass or stainless steel flush grating to hopper.
A single flush reversible plastics cistern (for mounting in duct) with ½in LP brass valve, plastics float, and metal flush pipe, and CP metal flushing lever handle.
Stainless steel hinged grid.
Stainless steel wall mounting brackets.
All exposed stainless steel finished No. 3B; outside of hopper finished bead blast.
Earthing terminal.

Options

Stainless steel support flame in lieu of wall brackets.
½ in HP brass valve.
Exposed cistern and pipework.
Plastics flush pipe.

Application

For disposal of liquid and solid waste. For use with concealed services: use with wall mounted supply fittings.

Fixing/Installation

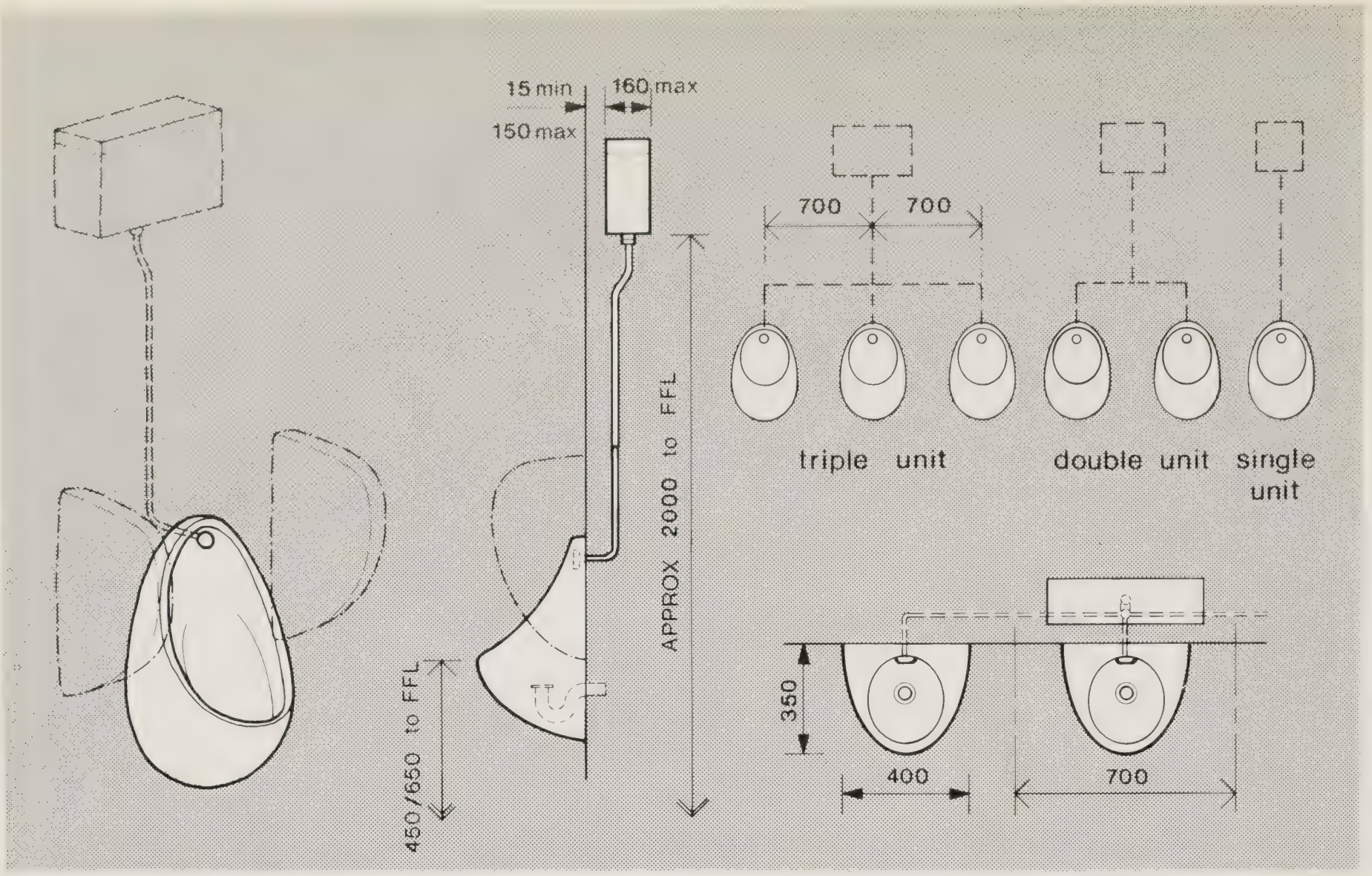
Disposal unit mounted on brackets and/or fixings suitable for screw fixing to wall or duct panel.
Provision for screw fixing concealed cistern and pipework.

- Make provision for discharge of overflow warning pipe.
- Should only be fed from tanked supply.
- Use HP valve option when connecting to water supply pressure in excess of 1.35 bar.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, no sharp edges.

UR H/1 .../2 .../3 Hospital Pattern Urinals



Identification

Wall mounted single, double or triple urinal with high level cistern and pipework for mounting in duct.

Standards

Vitreous china:-	BS 3402
Bowl urinals:-	BS 5520
Wastes:-	BS 3380:Part 1
Copper & copper alloy traps:-	BS 1184
Copper tube:	BS 2871:Part 1
Automatic flushing cistern:-	BS 1876

Description

White vitreous china bowl(s).
Plastics reversible cistern and cover with side supply.
12 mm pet cock and automatic siphon.
Metal flushing pipework and back inlet CP or stainless steel spreader.
1½ in. (38 mm) polished brass strainer waste outlet(s) and metal 'P' trap(s) with back outlet connection to concealed services.
All necessary fixing devices.

Options

Wall mounted screen panels.
Coloured glaze.
Plastics waste, trap and flush pipe.

Application

For use with concealed services.

Fixing/Installation

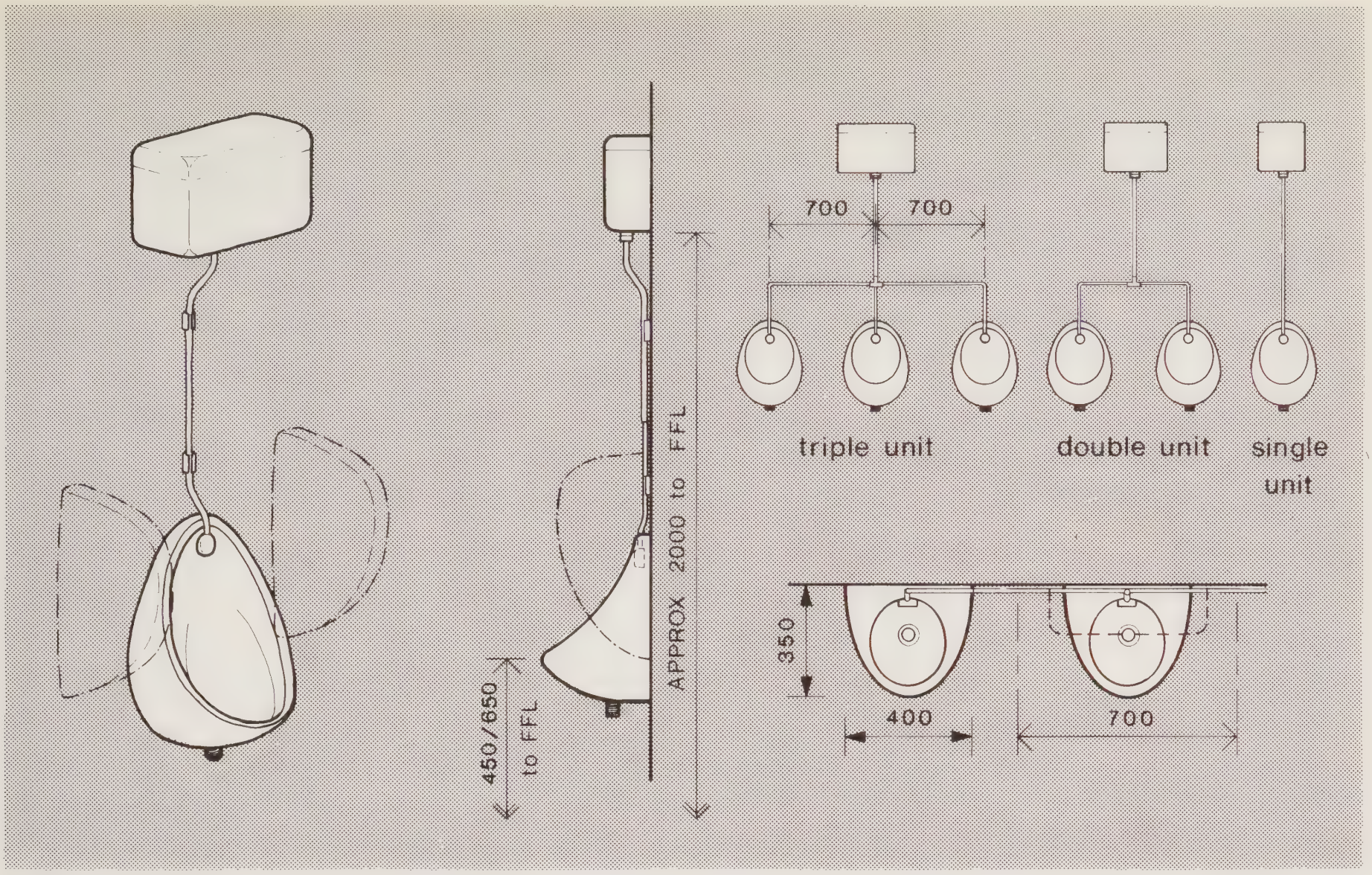
Concealed brackets and fixings for bowl (and screen panels).
Provision for screw fixing concealed cistern and pipework.

- Should only be fed from tanked supply.
- Cistern should not flush at intervals of less than twenty minutes (refer to local water bye-laws).

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

UG G/1 .../2 .../3 Urinals



Identification

Wall mounted single, double or triple urinal with exposed high level cistern and pipework.

Standards

Vitreous china:-	BS 3402
Bowl urinals:-	BS 5520
Wastes:-	BS 3380:Part 1
Stainless steel tube:-	BS 3605
Copper tube:-	BS 2871:Part 1
Automatic flushing cistern:-	BS 1876

Description

White vitreous china bowl(s).
White vitreous china cistern with secured cover, side supply and short outlet tail.
12 mm pet cock and automatic siphon.
Metal CP or stainless steel flushing pipework and spreader with easily cleaned pipe clips.
1½in. (38 mm) polished brass strainer waste outlet(s).
All necessary fixing devices.

Options

Wall mounted screen panels.
Coloured glaze.
Plastics waste, trap and flush pipe.

Application

For use with exposed services.

Fixing/Installation

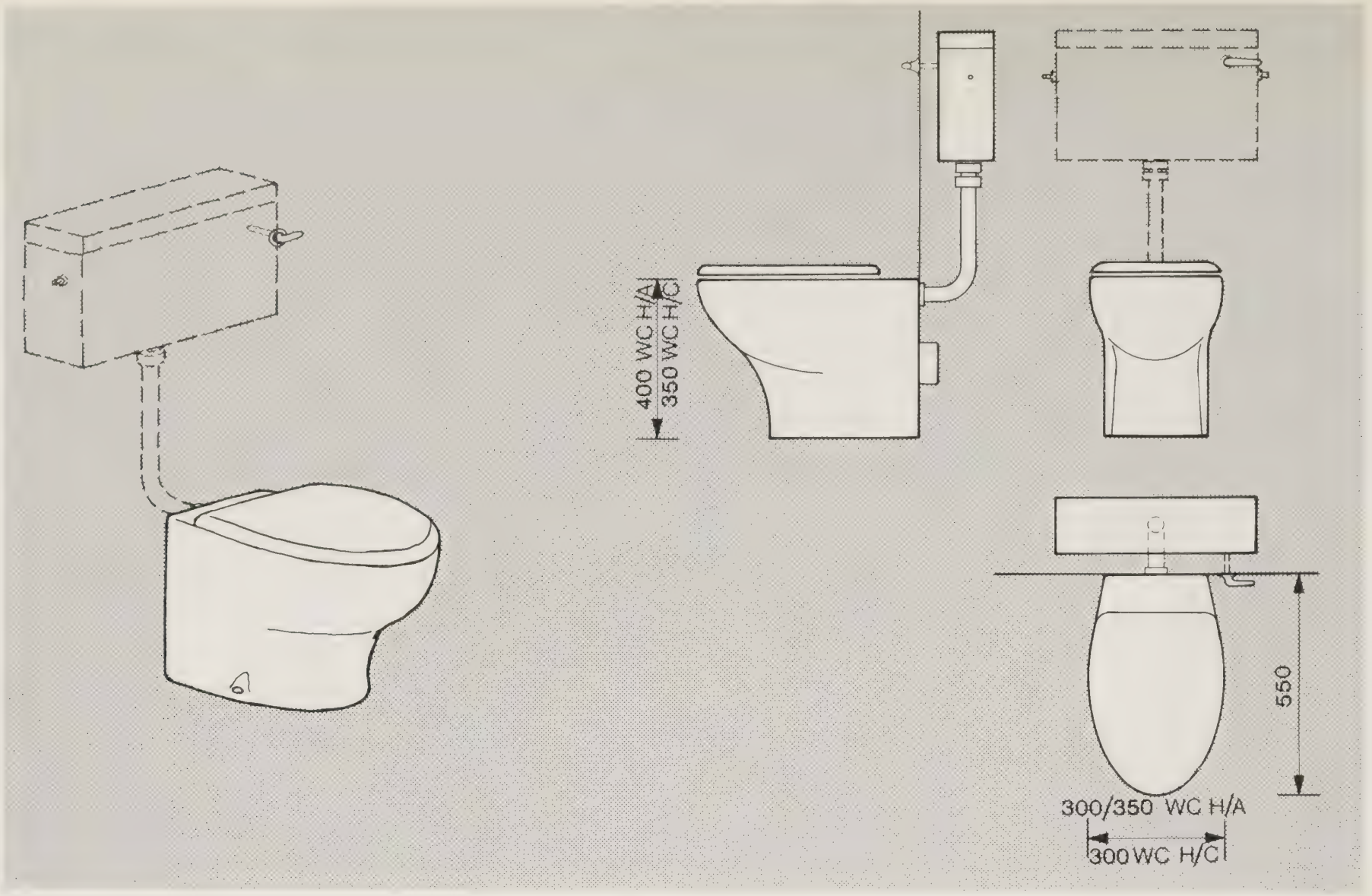
Concealed brackets and fixings for bowl and cistern (and screen panels).
Provision for screw fixing pipework.

- Should only be fed from tanked supply.
- Cistern should not flush at intervals of less than twenty minutes (refer to local water bye-laws).

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.
Pipe clips should be free from sharp edges and protrusions.

WC H/A Hospital Pattern WC—Adult Pattern
WC H/C Child Pattern



Identification

Low level wc with back-to-wall pan and cistern and pipework for mounting in duct.

Standards

Vitreous china:-	BS 3402
Washdown wc pans with horizontal outlet, generally as:-	BS 5503
WC flushing cisterns:-	BS 1125 BS 7357
Float operated valves:	
Diaphragm type:-	BS 1212
Floats (plastics) for ball valves:-	BS 2456
WC seats (plastics):-	BS 1254

Description

White vitreous china wash-down pan, suitable for use with sanitary chairs complying with BS 4751, with rimless or perforated box rim and with 'P' trap.
Plastics reversible cistern with ½ in LP brass valve, plastics float and siphon, flushing pipework, CP metal flushing handle.
White plastics ring seat and cover, set on easy-clean metal hinges.
Any necessary fixing devices.

Options

Colour glaze
Coloured seat and cover
½ in HP brass valve
Extension piece, 200 deep, where used in disabled peoples accommodation

Application

Suitable for use with concealed services.

Fixing/Installation

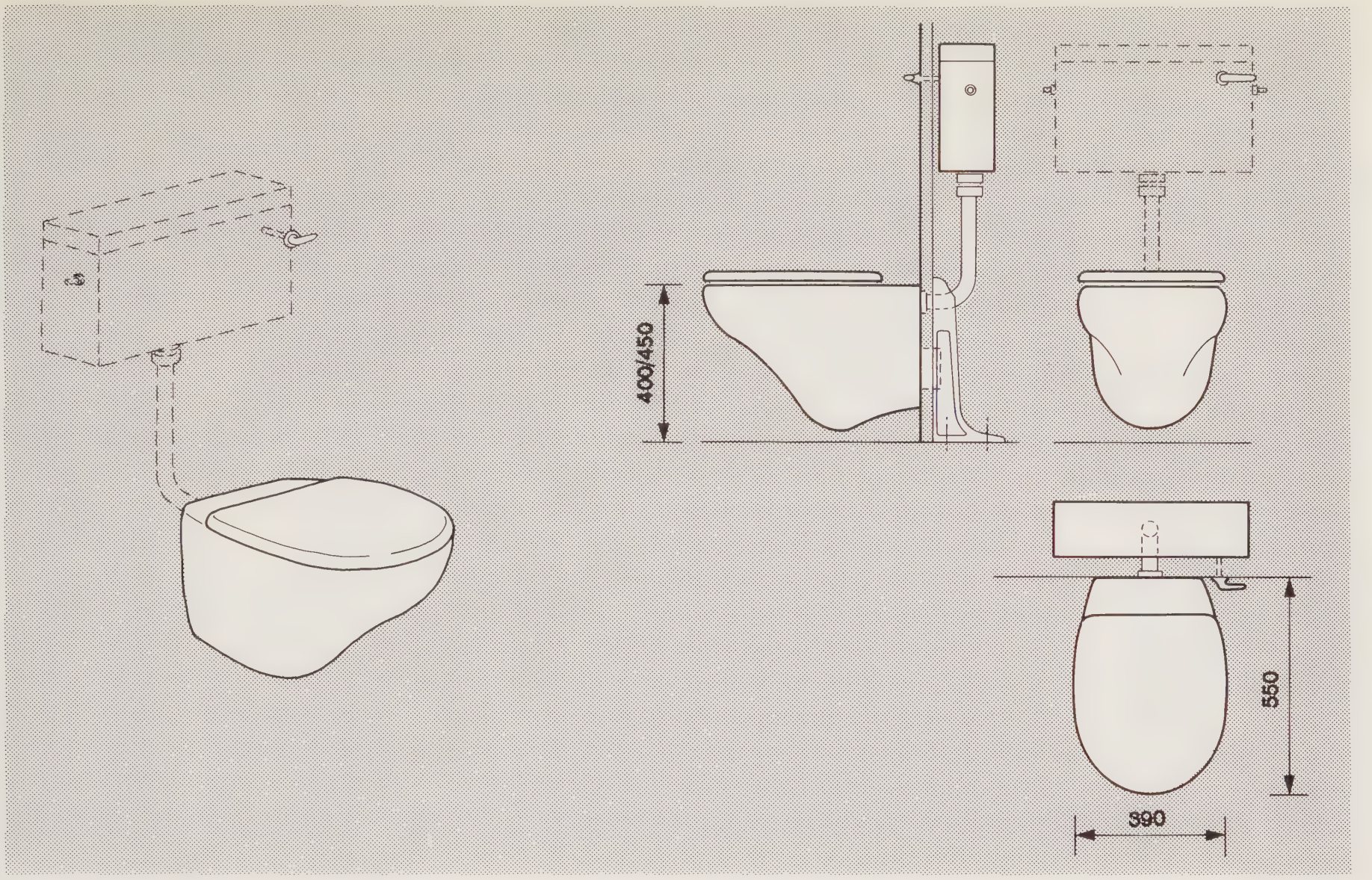
Pan prepared for screw fixings to floor; use screws with domed covers.
Provision for screw fixing concealed cistern and pipework

- Make provision for discharge of overflow warning pipe.
- Should only be fed from tanked supply.
- Use HP valve option when connecting to water supply pressure in excess of 1.35 bar.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned. Exposed surface of extension piece finished with melamine or similar material.

WC HC/A Hospital Pattern Corbelled WC—Adult Pattern



Identification

Low level corbelled wc with back-to-wall pan and cistern and pipework for mounting in duct.

Standards

Vitreous china:-	BS 3402
Washdown wc pans with horizontal outlet, generally as:-	BS 5504
WC flushing cisterns:-	BS 1125/BS 7357
Float operated valves:	
Diaphragm type:-	BS 1212
Floats (plastics) for ball valves:-	BS 2456
WC seats (plastics):–	BS 1254

Description

White vitreous china corbelled wash-down pan, suitable for use with sanitary chairs complying with BS 4751 or by wheelchair or ambulant users with rimless or perforated box rim and with 'P' trap.
Plastics reversible cistern with ½ in LP brass valve, plastic float and siphon, flushing pipework, CP metal flushing handle.
White plastic ring seat and cover, set on easy-clean metal hinges.
Any necessary fixing devices.
Support frame in aluminium alloy with bolts for panel fixing.

Options

Colour glaze.
Coloured seat and cover
½ in HP brass valves.
Extension piece, 200 deep, where used in disabled people accommodation.

Application

Suitable for use with concealed services.

Fixing/Installation

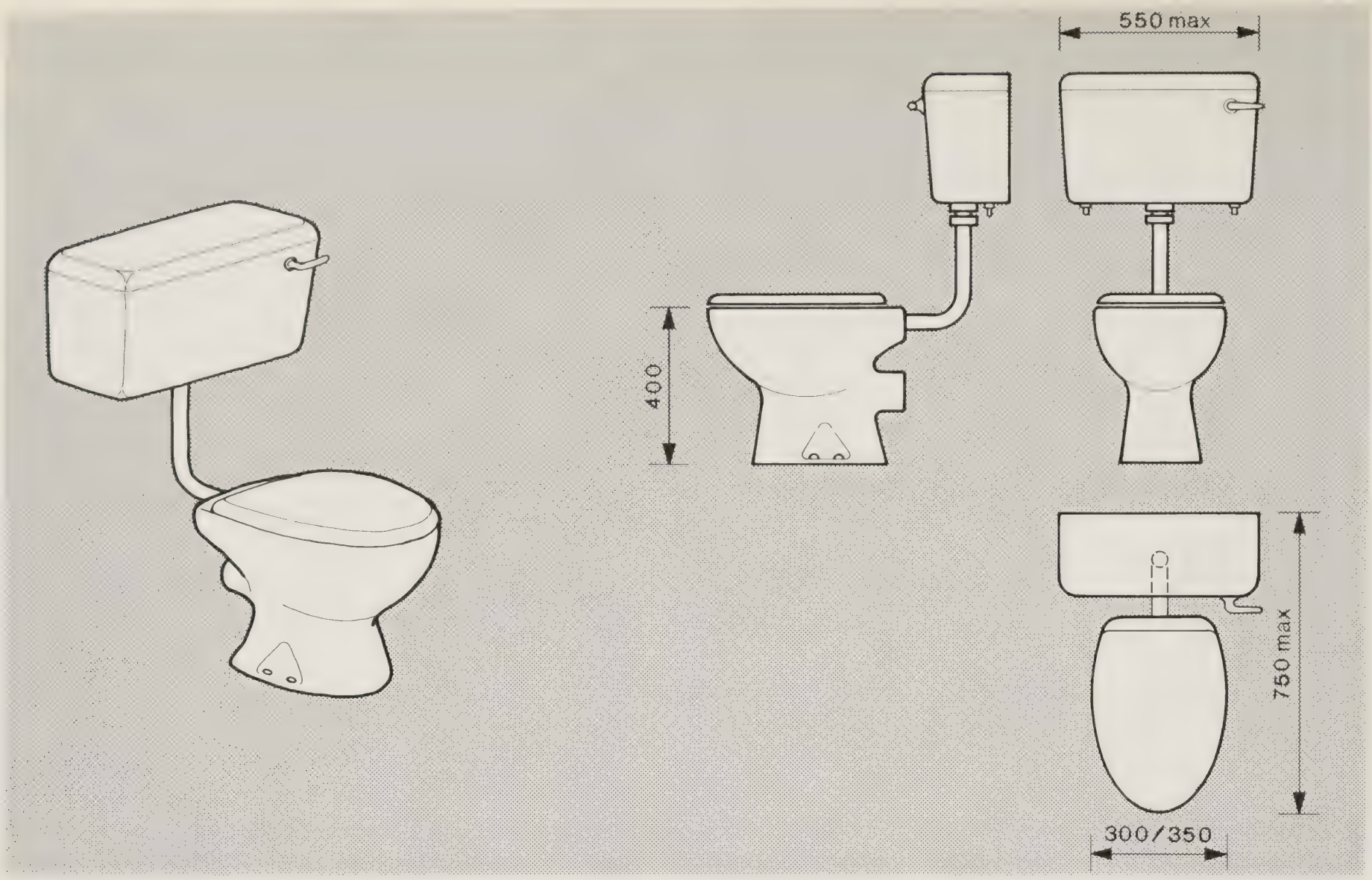
Pan prepared for bolt fixing to support frame.
Provision for screw fixing concealed cistern and pipework.

- Make provision for discharge of overflow warning pipe.
- Should only be fed from tanked supply.
- Use HP valve option when connecting to water supply pressure in excess of 1.35 bar.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.
Exposed surfaces of extension piece finished with melamine or similar material.

WC G/L Low Level Wash-Down WC



Identification

Low level wash-down wc with exposed cistern and pipework.

Standards

Vitreous china:-	BS 3402
Wash-down wc pans	
with horizontal outlet, generally as:-	BS 5503
WC flushing cisterns:-	BS 1125
	BS 7357
Float operated valves:	
Diaphragm type:-	BS 1212
Floats (plastics) for ball valves:-	BS 2456
WC seats (plastics):-	BS 1254

Description

White vitreous china wash-down pan (rimless or shallow open rim) with 'P' trap.
White vitrecus china cistern with secured cover and with bottom supply, overflow connections and short outlet tail, flushing pipework
½in LP brass valve, plastics float and siphon.
CP metal flushing handle.
White plastics ring seat and cover, set on easy-clean metal hinges with shortened fixing bolts.
Any necessary fixing devices.

Options

Coloured glaze
Coloured seat and cover
½ in HP brass valve

Application

Not suitable for use in connection with Medical/Nursing procedures.

Fixing/Installation

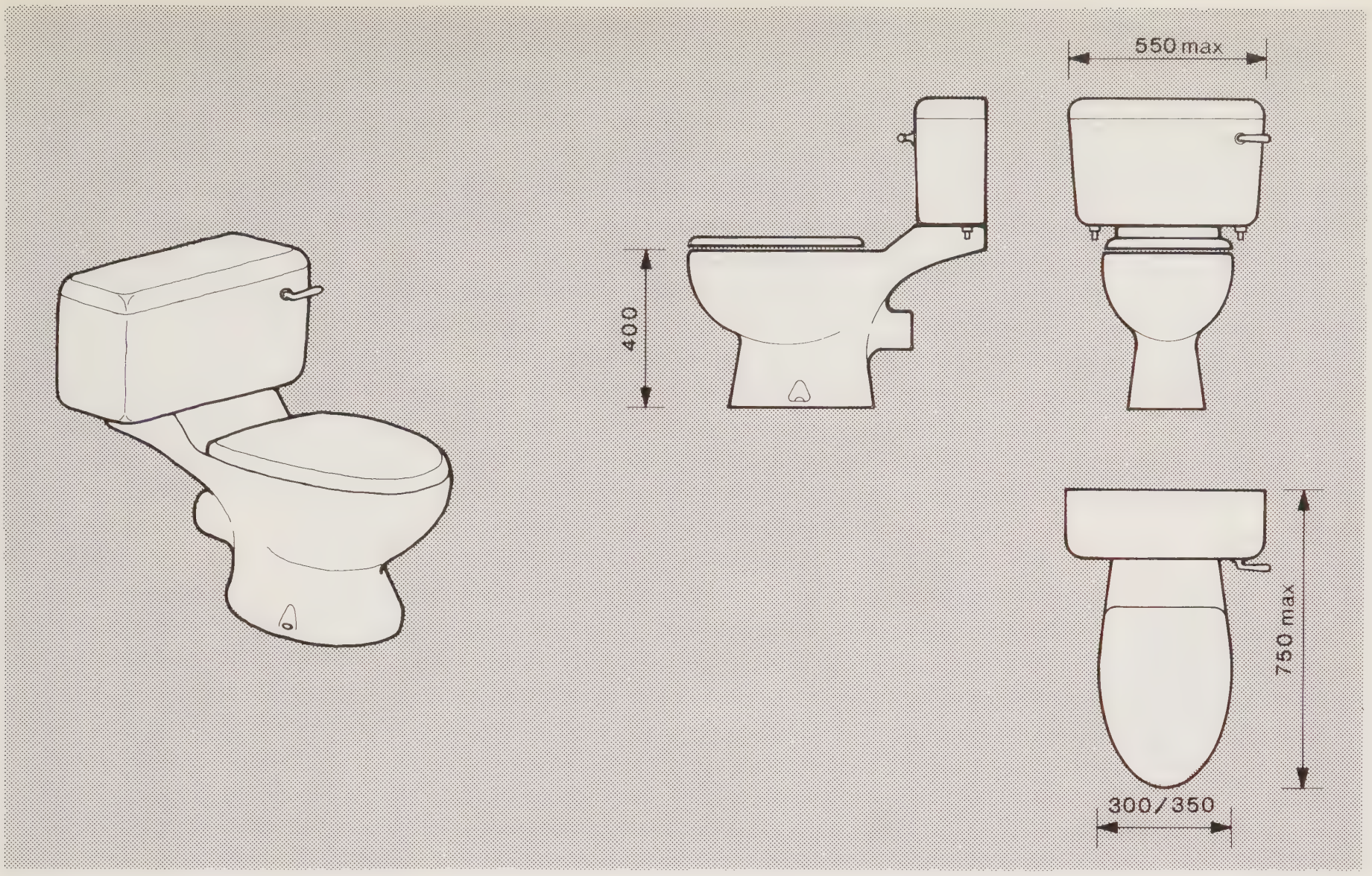
Pan prepared for screw fixings to floor; use screws with domed covers.
Cistern prepared for concealed screw fixings.
Cover secured with screws.

- Make provision for discharge of overflow warning pipe.
- Should only be fed from tanked supply.
- Use HP valve option when connecting to water supply pressure in excess of 1.35 bar.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, free from inaccessible crevices and protrusions.

WC G/C Close Coupled Wash-Down WC



Identification

Close coupled wash-down wc with exposed cistern.

Standards

Vitreous china:-	BS 3402
Wash-down wc pans with horizontal outlet:-	BS 5503
WC flushing cisterns:-	BS 1125
	BS 7358
Float operated valves:	
Diaphragm type:-	BS 1212
Floats (plastics) for ball valves:-	BS 2456
WC seats (plastics):-	BS 1254

Description

White vitreous china wash-down pan with rimless or perforated box rim and with 'P' trap.
White vitreous china cistern with secured cover, bottom supply and overflow connections.
½ in LP brass valve, plastics float and siphon.
CP metal flushing handle.
White plastics ring seat and cover, set on easy-clean metal hinges with shortened fixing bolts.
Any necessary fixing devices.

Options

Coloured glaze
Coloured seat and cover
½ in HP brass valve

Application

Not suitable for use in connection with Medical/Nursing procedures.

Fixing/Installation

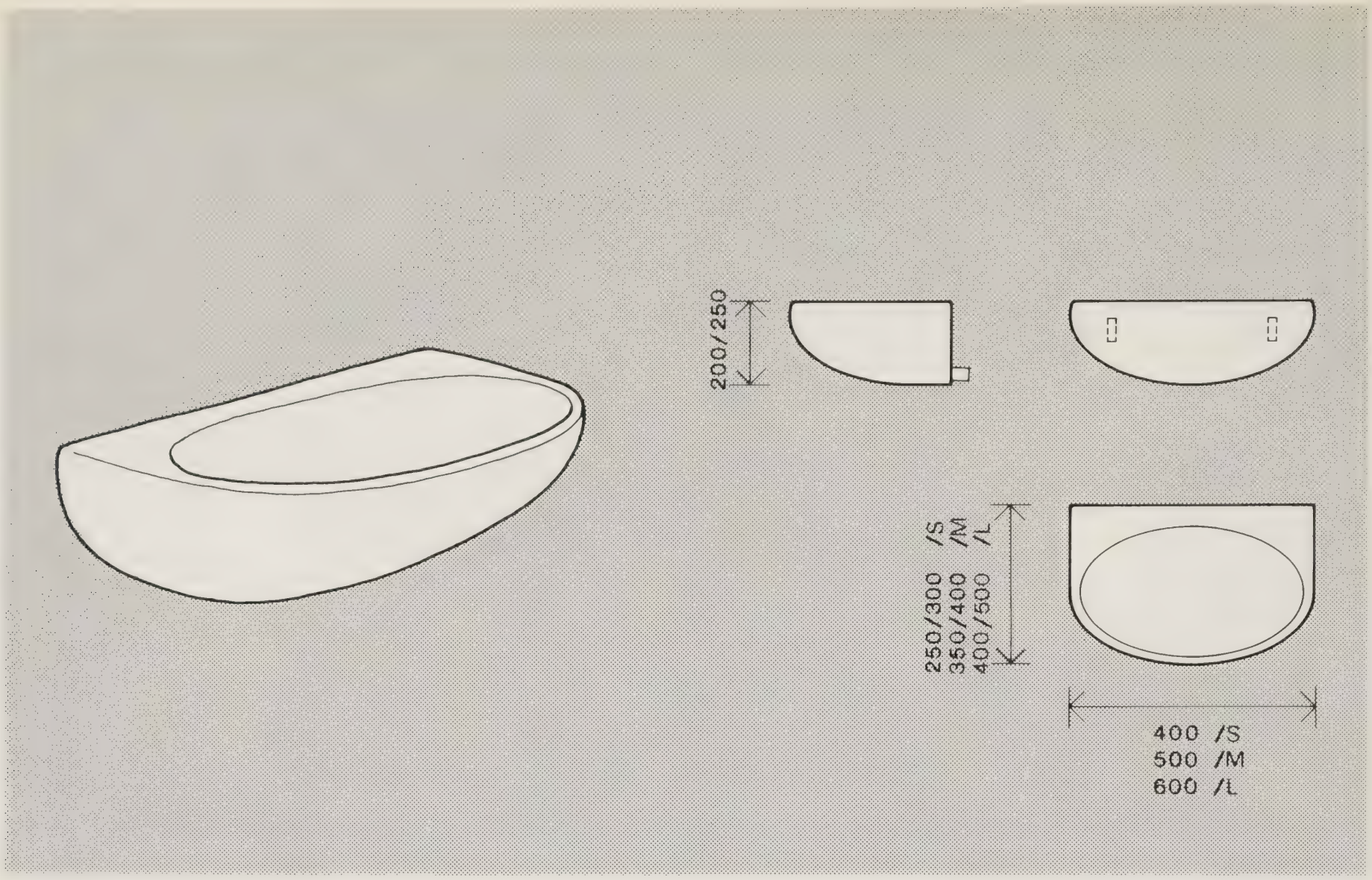
Pan prepared for screw fixings to floor; use screws with domed covers.
Cistern prepared for concealed screw fixings.
Cover secured with screws.

- Make provision for discharge of overflow warning pipe.
- Should only be fed from tanked supply.
- Use HP valve option when connecting to water supply pressure in excess of 1.35 bar.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, free from inaccessible crevices and protrusions.

LB H/S .../M .../L Hospital Pattern Basins



Identification

Wall mounted basin available in three sizes; small, medium or large with back outlet.

Standards

Vitreous china:- BS 3402

Description

White vitreous china basin with concealed fixings, no tap holes, no overflow, maximum bowl size.
Back outlet connection to concealed services.
Any necessary support brackets.

Options

Coloured glaze.

Application

For use with concealed services; use with wall mounted supply fittings. Suitable for use by seated patients.

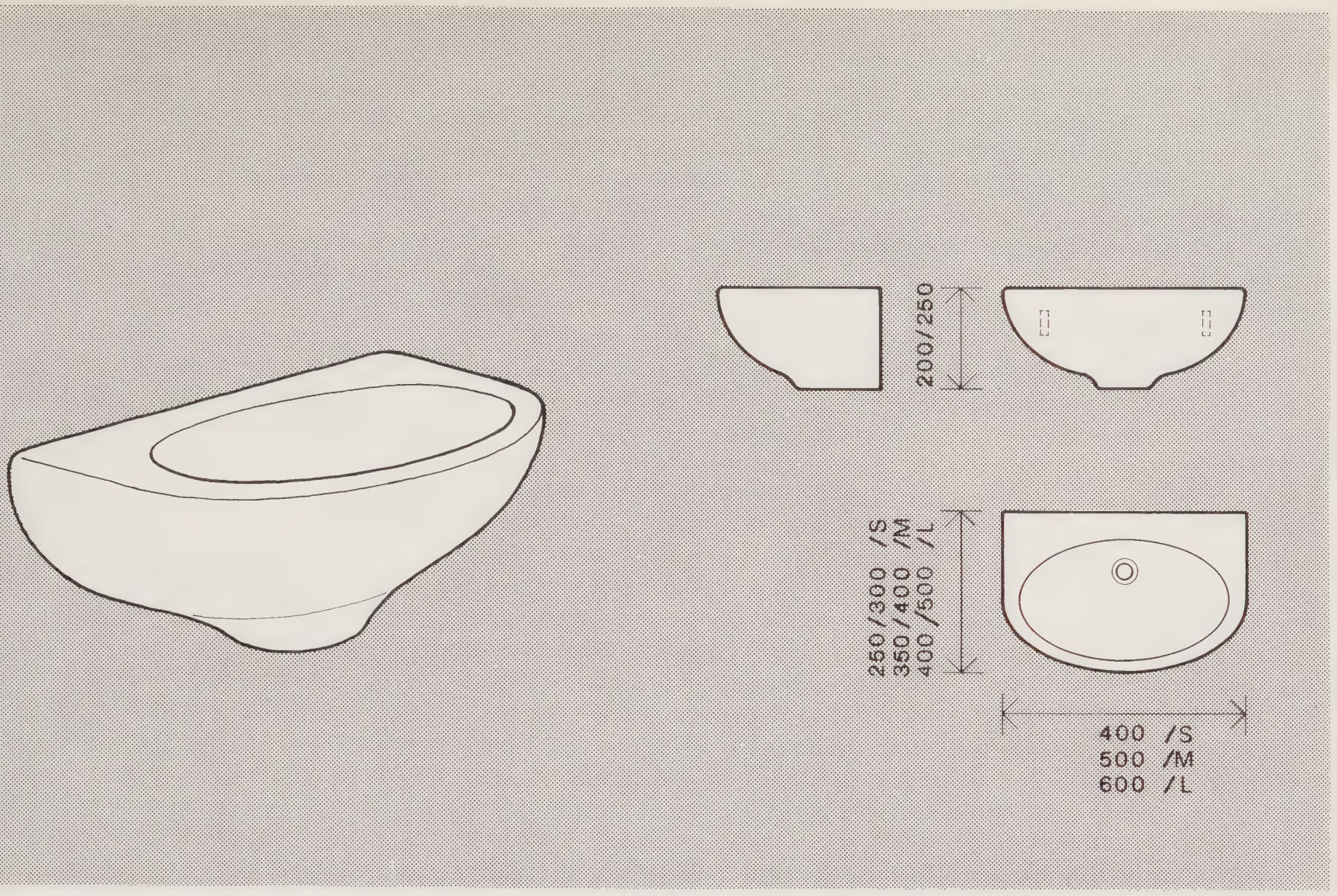
Fixing/Installation

Basin mounted on concealed brackets and fixings suitable for duct panels.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

LB G/S .../M .../L General Basin



Identification

Wall mounted basin available in three sizes; small, medium or large with bottom outlet.

Standards

Vitreous china:- BS 3402

Description

White vitreous china basin with concealed fixings, no tap holes, no overflow, maximum bowl size.
Bottom outlet.
Any necessary support brackets.

Options

On medium basin - two tap holes.
On medium or small basin - one tap hole, right hand.
Coloured glaze.

Application

For use with concealed services; use with wall mounted supply fittings.
Use tap hole option(s) with pillar supply fittings.

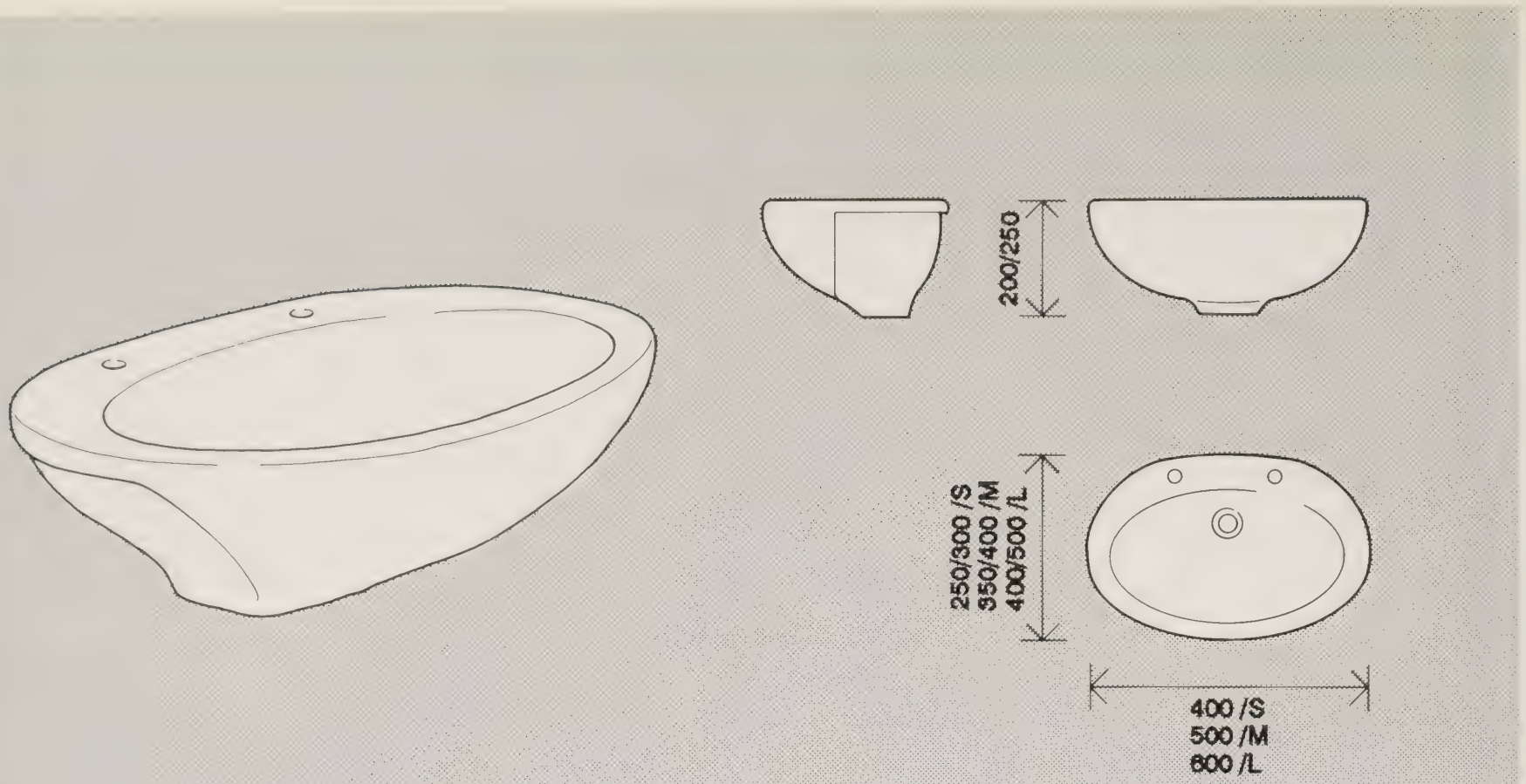
Fixing/Installation

Basin mounted on concealed brackets and fixings suitable for duct panels.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

LB GS/S ../M../L General Basin Semi Recessed



Identification

Top mounted semi-recessed basin available in three sizes; small, medium or large with bottom outlet.

Standards

Vitreous:- BS 3402

Description

White vitreous china basin with concealed fixings two tapholes, no overflow, maximum bowl size.
Bottom outlet.
Any necessary fixing brackets.

Options

On medium or small basin - one central tap hole.
On medium or small basin - one tap hole, right hand.
Coloured glaze.

Application

For use with concealed services; use with pillar supply fittings.

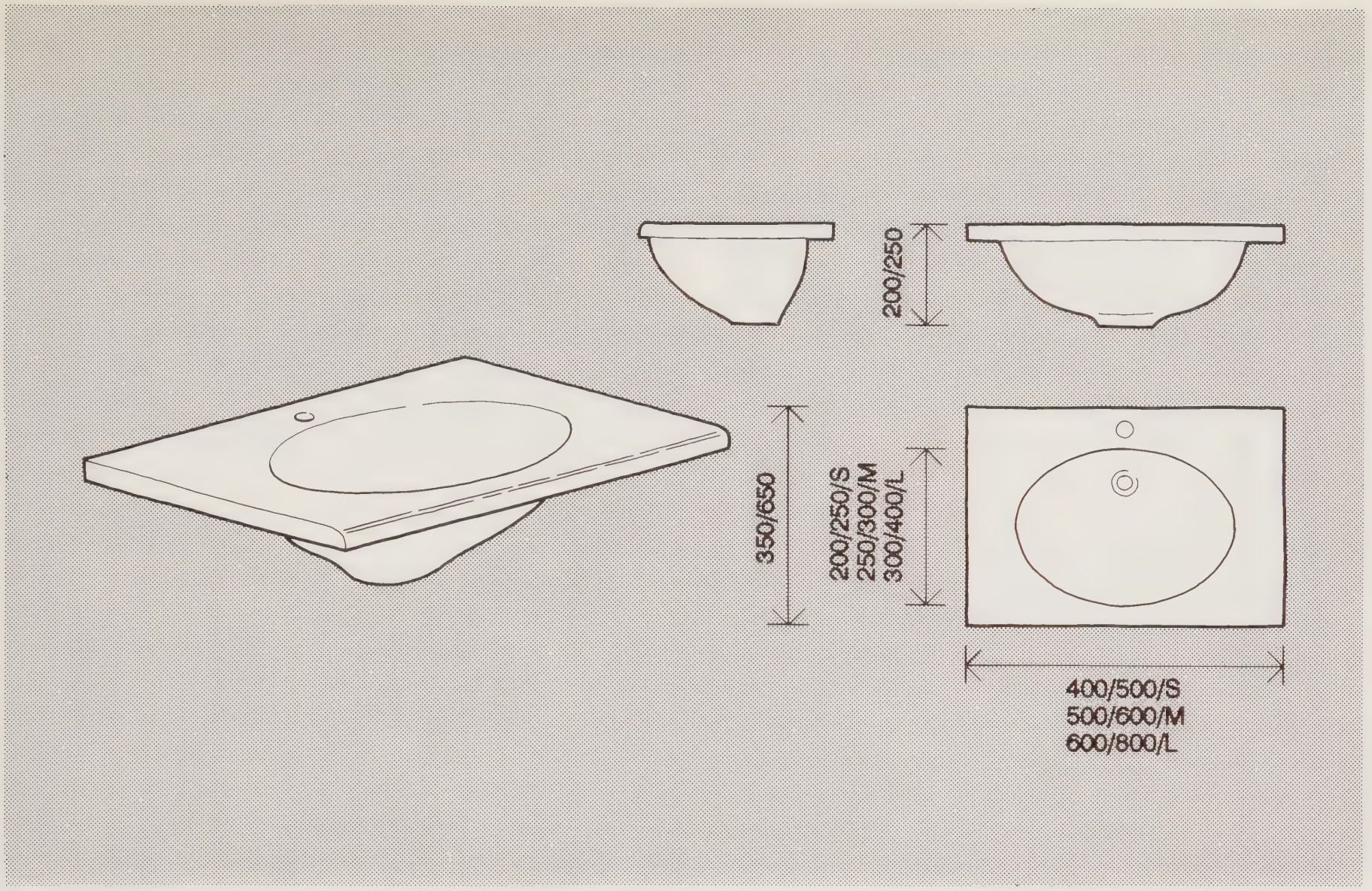
Fixing/Installation

Based semi-recessed into top with concealed brackets and fixings suitable for box duct assembly.

Cleaning/Maintenance

Exposed surfaces smooth and easely cleaned.

LB G I/S .../M .../L General Basin Inset



Identification

Top with integral inset basin in three sizes; small, medium or large with bottom outlet.

Standards

None applicable to cast resins
Vitreous China:- BS 3402

Description

White cast epoxy resin top with inset basin and concealed fixings, one tap hole, no overflow, maximum bowl size.
Bottom outlet
Any necessary fixing brackets/cleats.

Options

No taphole(s).
On medium or large basin - two tap holes.
On medium or small basin -one tap hole, right hand.
Coloured.
Profile and depth of top to suit those shown in HTM's 62, 63 and 67.
Cast polyester resin.
Cast acrylic resin.
Solid surfacing materials.
Vitreous china.
Inset basin as an integral part of a work top.

Application

For use on vanity/base unit with concealed services; use with pillar supply fittings.

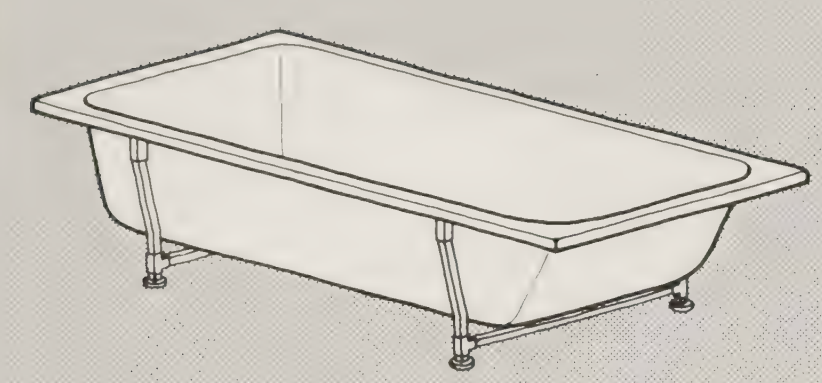
Fixing/Installation

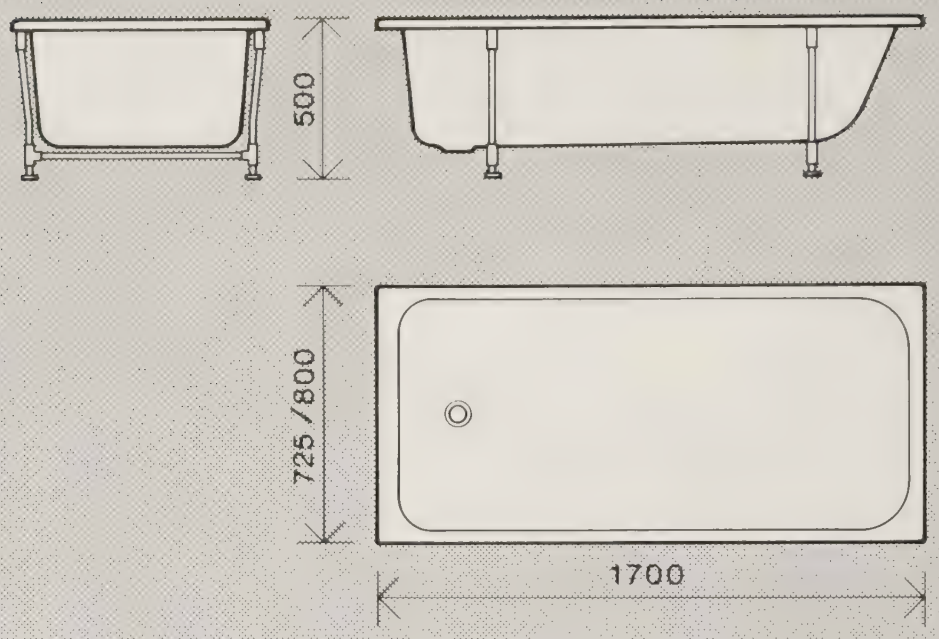
Top/basin mounted on vanity/base unit with concealed fixing brackets/cleats, suitable for box ducts, vanities, laboratories.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

BA H/M Hospital Pattern Metal Bath





Identification

Flat topped metal bath for assisted use.

Standards

Sheet steel baths for domestic purposes:-	BS 1390
Cast Iron baths for domestic purposes:-	BS 1189
Vitreous Enamel:-	BS 1344

Description

Vitreous/ Porcelain enamelled pressed steel 2.5 mm thickness or cast iron bath with slip resistant bottom, no tap holes, no overflow, no chain stay hole, no handles.
Suitable for use with patient hoists.
Smooth finish to external surfaces.
Supporting framework/legs with adjustable feet.
Any necessary fixing devices.
Earthing terminal.

Options

Coloured enamel.
Handle(s) - **Note**: Bath recessed to accommodate non-projecting handle(s).

Application

For use with concealed services; use with wall mounted supply fittings.

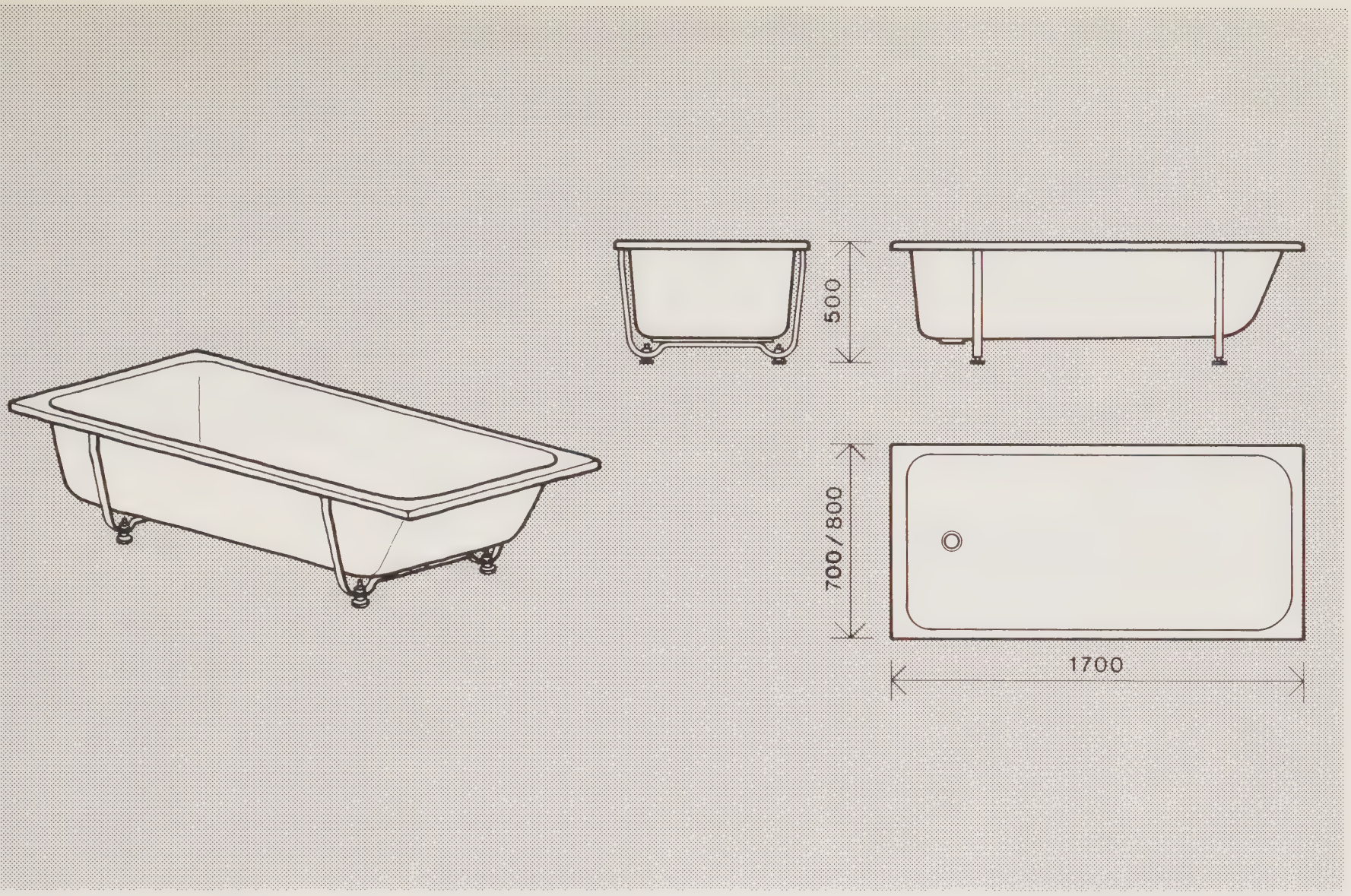
Fixing/Installation

Framework set on plinth. Provision for builders work plinth and panels to one end and two sides.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.
Exposed surfaces of builders work panels and plinth finish with melamine or similar material.

BA H/P Hospital Pattern Plastics Bath



Identification

Flat topped plastics bath for assisted use.

Standards

Cast acrylic baths for domestic purposes, generally as:-	BS 4305
Cast acrylic sheet for baths for domestic purposes, generally as:	BS 7015

Description

5 mm nominal thickness specially reinforced white plastics bath with slip resistant bottom, no tap holes, no overflow, no chain stay hole. no handles.
Suitable for use with patient hoists.
Smooth finish to external surfaces.
Rust proof metal supporting framework and adjustable feet.
Any necessary fixing devices.

Options

Coloured plastics.
Handle(s) - Note: Bath recessed to accommodate non-projecting handle(s).

Application

For use with concealed services; use with wall mounted supply fittings.

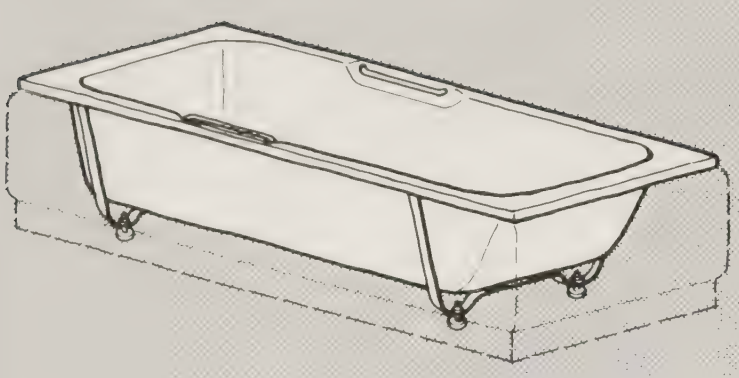
Fixing/Installation

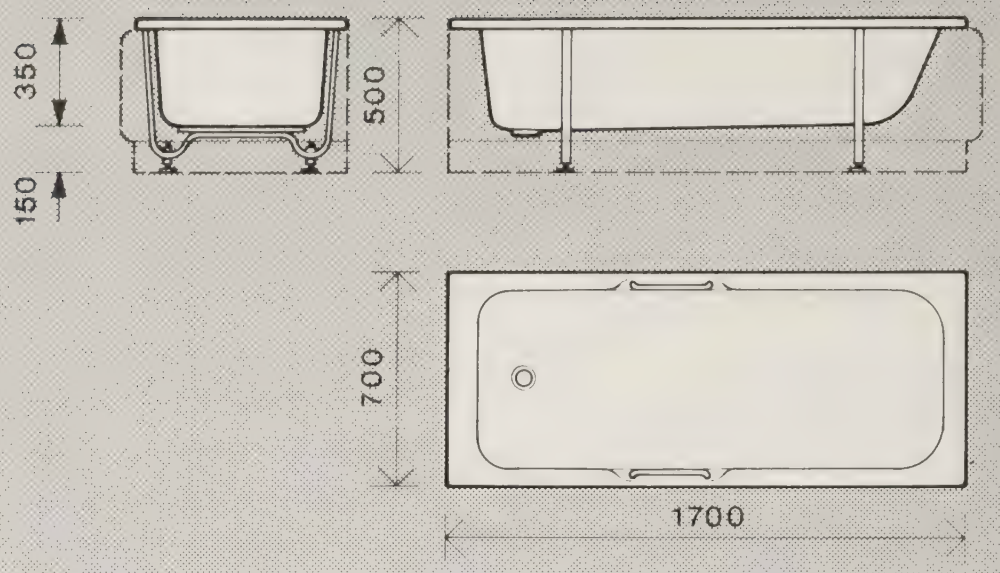
Framework set on plinth. Provision for builders work plinth and panels to one end and two sides.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.
Exposed surfaces of builders work panels and plinth finish with melamine or similar material.

BA G General Bath





Identification

Flat topped plastics bath with overflow.

Standards

Cast acrylic baths for domestic purposes:-	BS 4305
Cast acrylic sheet for baths for domestic purposes:	BS 7015

Description

5 mm thick, fully reinforced. white plastics bath with two recessed handles, no tap holes, supporting framework, adjustable feet.

Options

Coloured plastics.
Matching removable end and side panels with recessed toe space.

Application

Not suitable for assisted use.

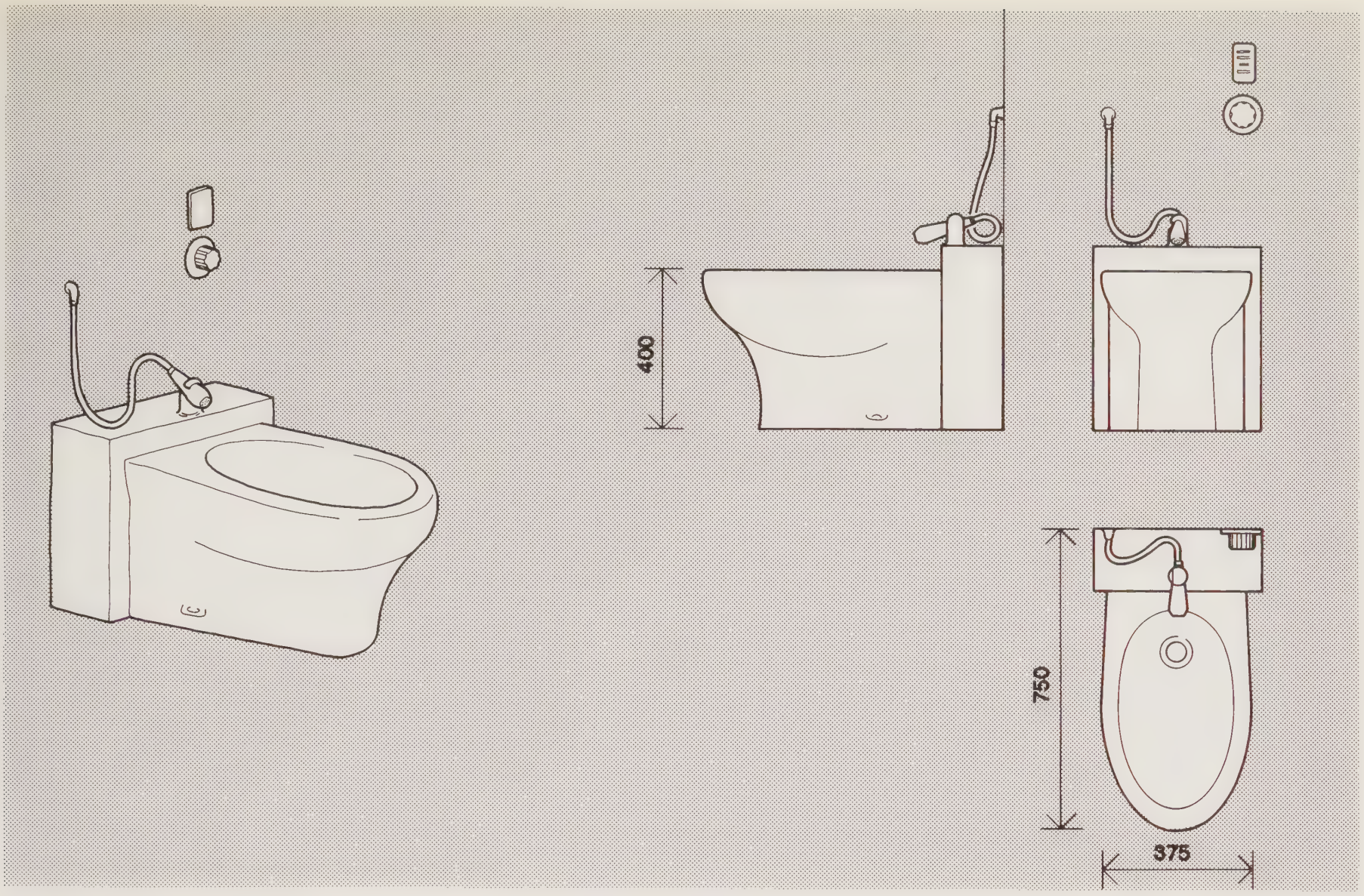
Fixing/Installation

Framework set on floor (panels secured by concealed fixings).
If used with pillar taps drill on site for tap holes.
Note: plumbing installation is simplified by using corner tap holes.

Cleaning/Maintenance

Exposed surfaces to be smooth and easily cleaned.

BD H Hospital Pattern Bidet



Identification

Back to wall pedestal bidet and thermostatic mixer with flexible hose and handset spray.

Standards

Vitreous china:-	BS 3402
Wastes:-	BS 3380

Description

White vitreous china bidet, rimless with no tapholes, no overflow, with outlet to suit 1¼ in (32mm) waste, no plug. Extension piece/box to achieve 750mm projection and accept/include panel mounted thermostatic mixer valve with single control and wall outlet with flexible hose connecting to deck mounted handset spray with narrow beam 50mm diameter at 450mm.
Notice on use of mixer valve.

Options

Coloured glaze.

Application

Use with wall mounted thermostatic mixer valve with handset spray.

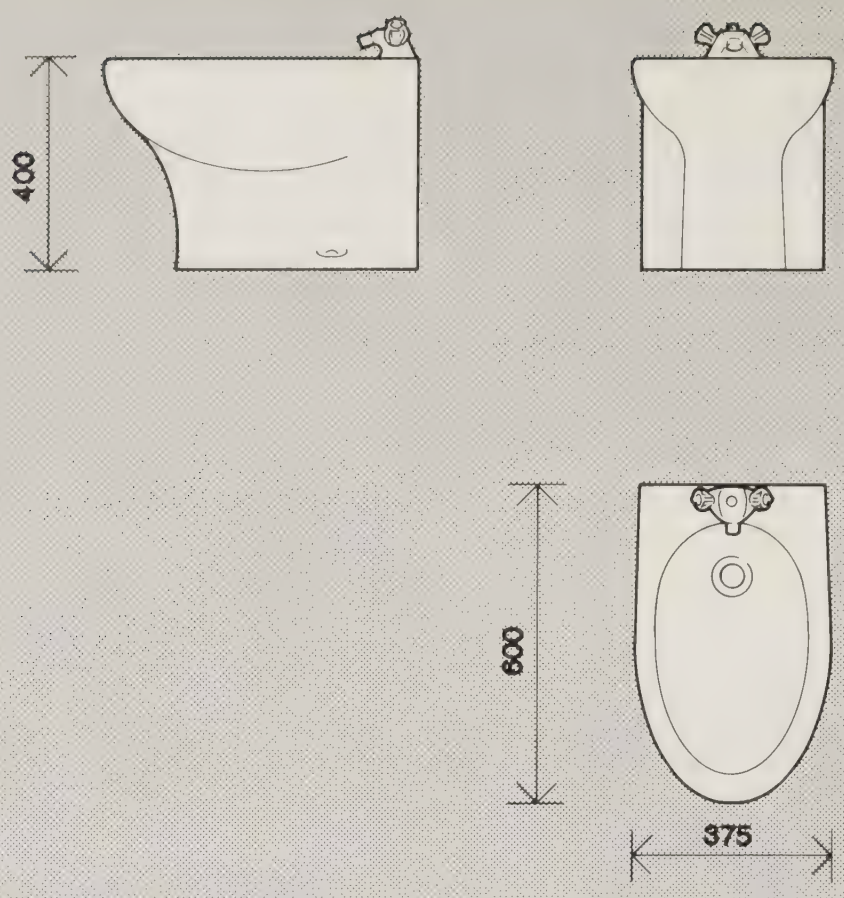
Fixing/Installation

Prepared for screw fixing to floor. Special provision against back-siphonage is required (Refer to water bye-laws).
Note: Supply fixing must only be fed from tanked supply.

Cleaning/Maintenance

Exposed surfaces to be smooth and easily cleaned.
Exposed surfaces of extension piece finish with melamine or similar material.

BD G General Bidet



Identification

Back to wall pedestal bidet with thermostatic over-rim supply.

Standards

Vitreous china:-	BS 3402
Wastes:-	BS 3380
Bidet with over-rim supply:	BS 5505

Description

White vitreous china bidet, rimless with tap hole including pillar (deck mounted) thermostatic mixer with separate manual control of hot and cold supply and adjustable spray nozzle (alternatively use TP8).
No overflow, with outlet to suit
1¼ in (32mm) waste, with pop-up plug.

Options

Coloured glaze.

Application

Use with over-rim thermostatic mixer valve with adjustable spray nozzle.

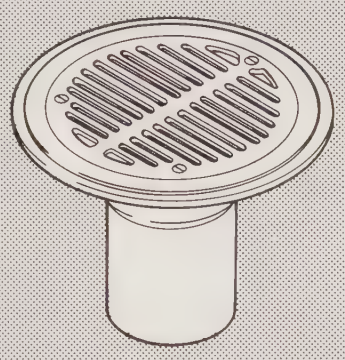
Fixing/Installation

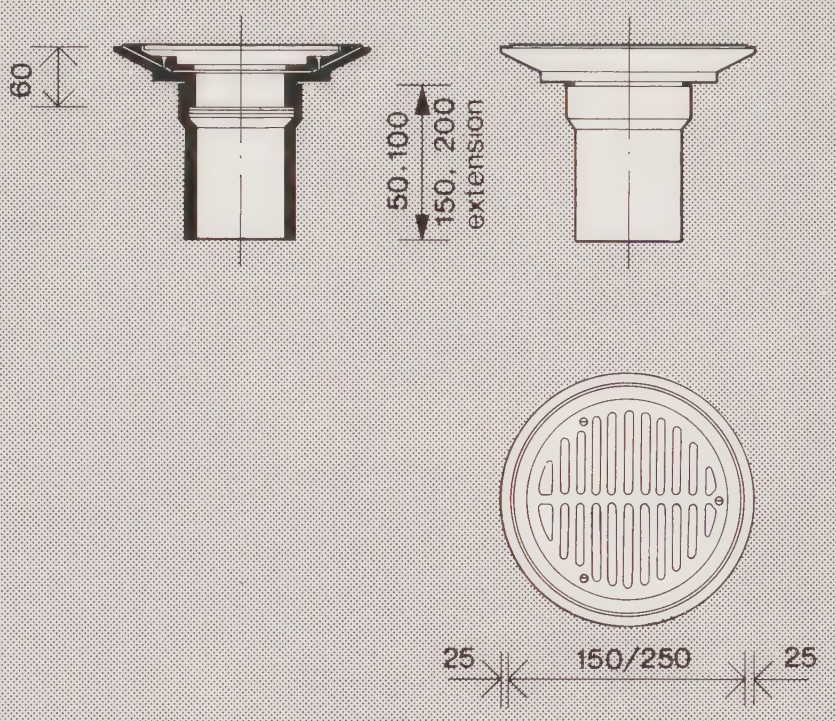
Prepared for screw fixing to floor. Special provision against back-siphonage is required (Refer to water bye-laws).
Note: Supply fitting must only be fed from tanked supply.

Cleaning Maintenance

Exposed surfaces to be smooth and easily cleaned.

FO H Hospital Pattern Floor Outlet





Identification

Floor drainage outlet and grating.

Standards

Cast iron:-	BS 3468
Stainless steel:-	BS 1449:Part 2

Description

A non rusting shower outlet with Nickel Bronze screw down grating, surface clamping ring and 100 mm diameter outlet spigot with threaded tail.
Cast iron extension (specify length 50, 100, 150 or 200 mm) with internal thread for connection to outlet and plain tail.

Options

Stainless steel grating.
Polished Bronze grating.
Rough Bronze galvanised extension.
Threaded tail to extension piece.

Application

Suitable for use in connection with Medical/Nursing procedures where showers are formed in builders work.

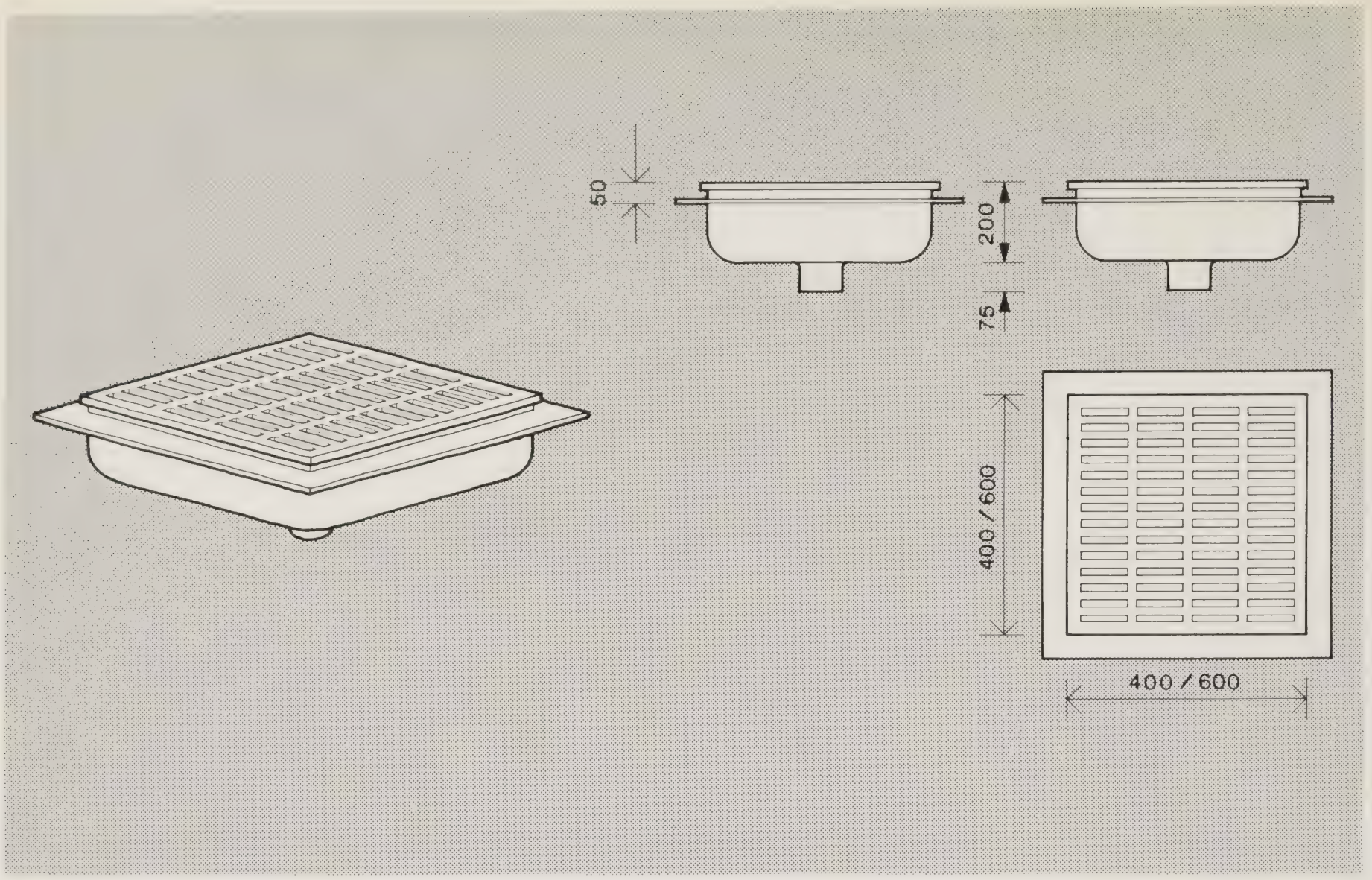
Fixing/Installation

Grout into floor, seal spigot to drain and seal floor finish to rim of outlet.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, no sharp edges.

FO G Floor Outlet



Identification

Floor drainage outlet and grating.

Standards

Cast iron:-	BS 3468
Stainless steel:-	BS 1449:Part 2
Galvanized coatings:-	BS 729

Description

A non rusting drainage hopper for disposal of bulk liquids and liquid wastes from floor cleaning machines: with lift-out non-rocking stainless steel grating. 100 mm diameter outlet spigot, and flange to receive floor finishes.

Options

Galvanized cast iron grating.

Application

Suitable for domestic service use in main cleaners rooms, service departments etc.
Use with wall mounted hot and cold taps and length of hose.

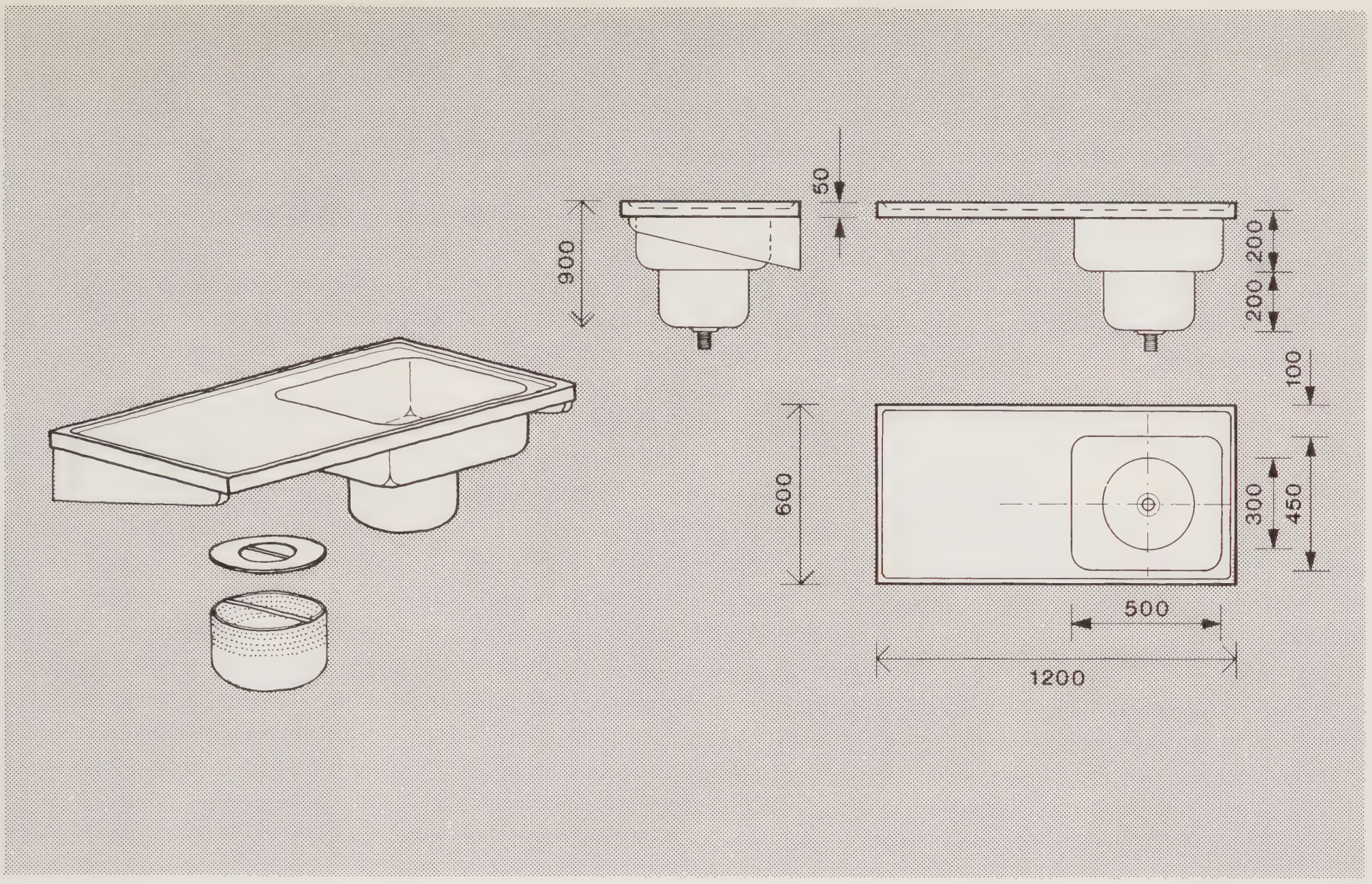
Fixing/Installation

Grout into floor, seal spigot to drain and seal floor finish to rim of outlet.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned. no sharp edges.

PS H Hospital Pattern Plaster Sink



Identification

Stainless steel plaster sink with integral plain top.
Left hand unit (illustrated).

Standards

Stainless steel type 304 S16:-	BS 1449:Part 2
Wastes:-	BS 3380

Description

A plain top of stainless steel (min. 16 swg or where press formed 18 swg) with no tapholes, no upstand, edges rimmed (min 13 mm high) and turned down, underside sound deadened with smooth impermeable easily cleaned material and/or underlined with stainless steel. The top incorporates a rectangular sink bowl, without overflow, with a round sump, containing a partially perforated stainless steel basket and covered by a close fitting stainless steel cover with recessed handle.
1½ in (38 mm) unslotted flush grated waste (CP on brass).
Stainless steel wall mounting brackets.
All exposed stainless steel finished No. 3B; outside of sink and sump finished bead blast.
Earthing terminal.

Options

Tap holes
Stainless steel support frame in lieu of wall brackets.
Right hand unit.
Front edge profiles may be square as illustrated or with rollfront edge (and upstand at rear) to suit profile shown in HTM 62 and 63.
650 depth where matching HTM 63 worktop profile.

Application

Use with bib taps.
Use option with tap holes when supply pipework is surface mounted below sink top.
Suitable for mounting on wall brackets, stand supports, or base unit.

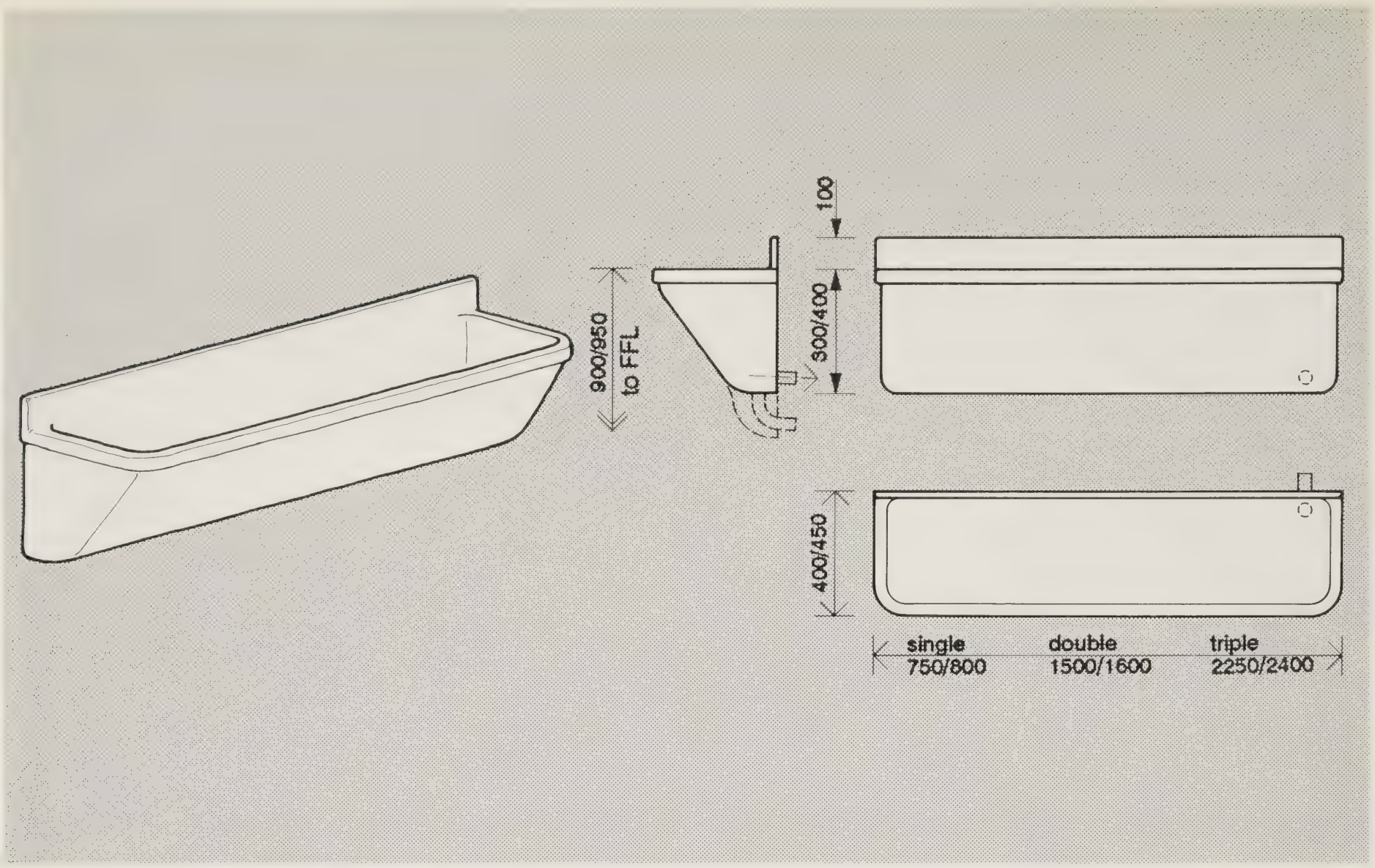
Fixing/Installation

Concealed fixing clips.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, no sharp edges, all internal corners radiused.

SU H/1 .../2 .../3 Hospital Pattern Scrub-Up Trough



Identification

Wall mounted stainless steel scrub-up trough.
Left hand outlet

Standards

Stainless steel - type 304 S16:- BS 1449: Part 2

Description

Stainless steel trough (min 16 swg) in three sizes; single, double, and triple person, shaped to avoid splashing, with all internal corners radiused, outlet at one end to suit.
1½ in (38mm) connection to concealed pipework in duct.
Any necessary fixing devices.
All exposed stainless steel finished No. 3B; outside of trough finished bead blast.
Earthing terminal.

Options

Other lengths to special order.
Left hand outlet.
Shrouded bottom outlet with 90 degree bend in stainless steel.
High backed upstand - specify dimension.

Application

For use with concealed services; use with wall mounted supply fittings.

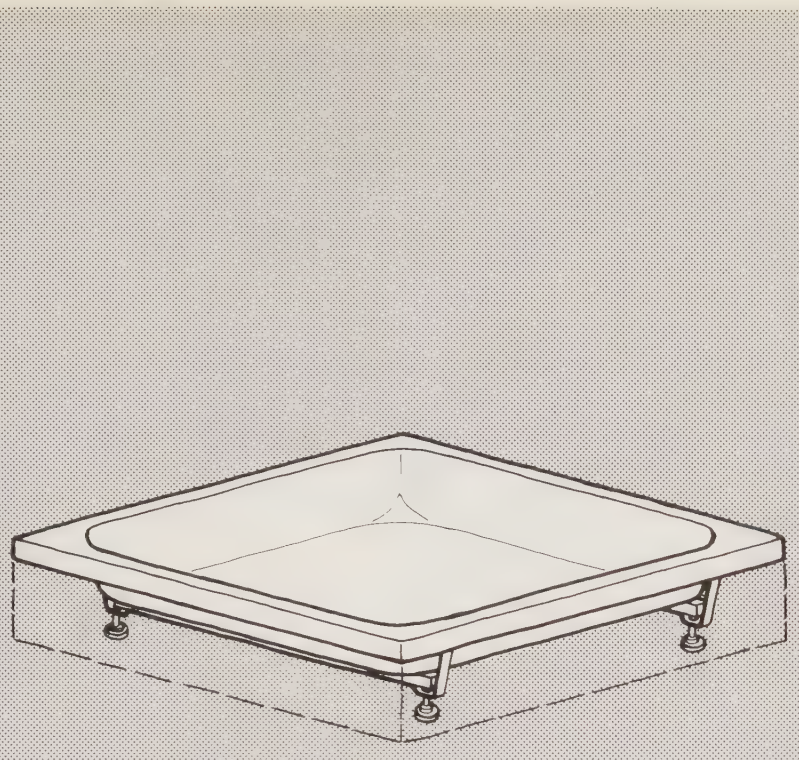
Fixing/Installation

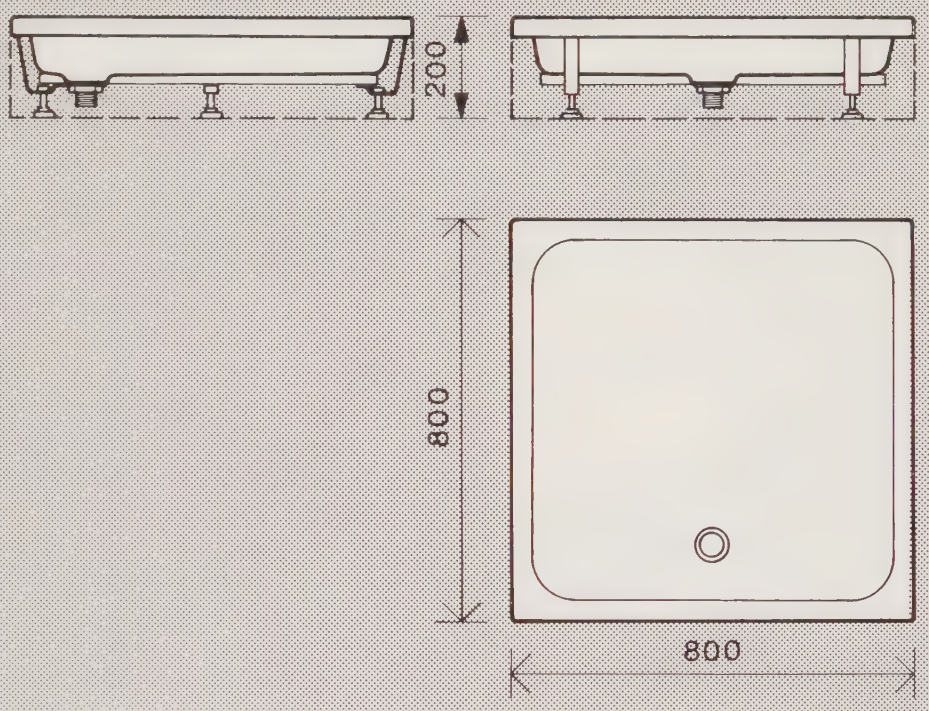
Concealed fixings suitable for duct panels and for masonry.

Cleaning Maintenance

Exposed surfaces to be smooth and easily cleaned, no sharp edges.

SH G/P Plastic Shower Receiver





Identification

Floor standing square plastics shower tray (receiver).

Standards

Shower units:-	BS 6340:Part 1 BS 6340:Part 2
Specification for prefabricated shower trays made from acrylic material:-	BS 6340:Part 5
Cast acrylic sheet for shower trays for domestic purposes:-	BS 7015

Description

Minimum 5mm thick white plastics tray.
Slip resistant base
1½ in (38mm) CP on brass flush strainer waste with removable grate.
Any necessary support framework and fixing devices in non rusting materials.

Options

Coloured plastics.
Enclosing panels on front only.
or on front and one side
or on front and two sides

Application

For use with wall mounted supply fittings.
Not for patient use.

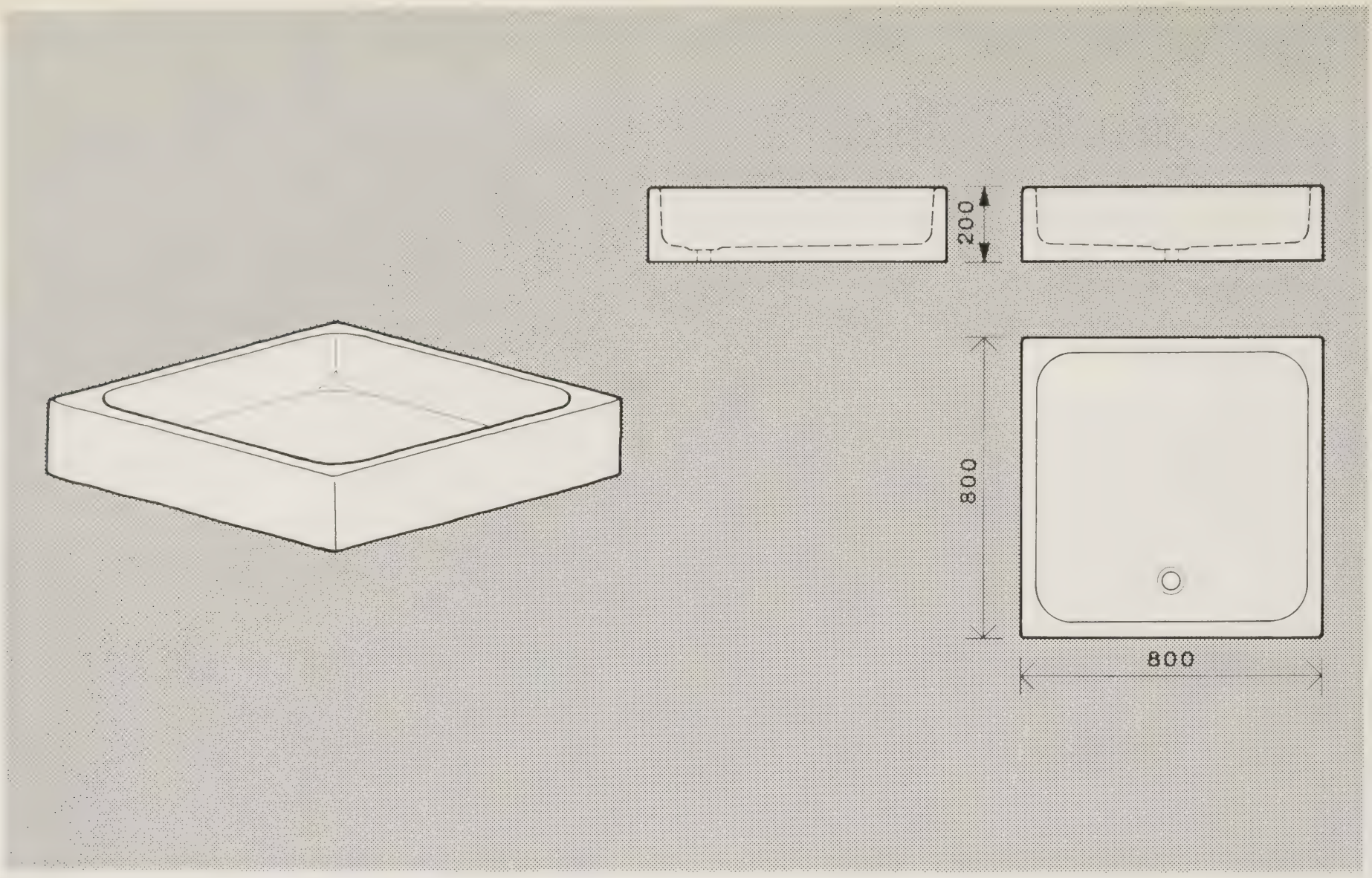
Fixing/Installation

Install with outlet to front for ease of access to waste. Framework set on floor; panels secured by concealed fixings.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

SH G/C Ceramic Shower Receiver



Identification

Floor standing square ceramic shower tray (receiver).

Standards

Shower unit:-	BS 6340:Part 1 BS 6340:Part 2
Specification for prefabricated shower trays made from glazed ceramic:-	BS 6340:Part 8

Description

White ceramic tray.
Slip resistant base.
1½in (38mm) CP on brass flush strainer waste with removable grate.

Options

Coloured glaze.

Application

For use with wall mounted supply fittings.
Not for patient use.

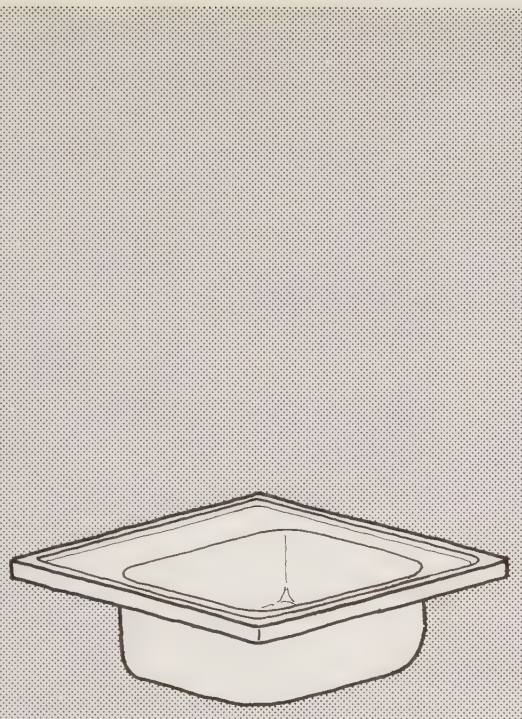
Fixing/Installation

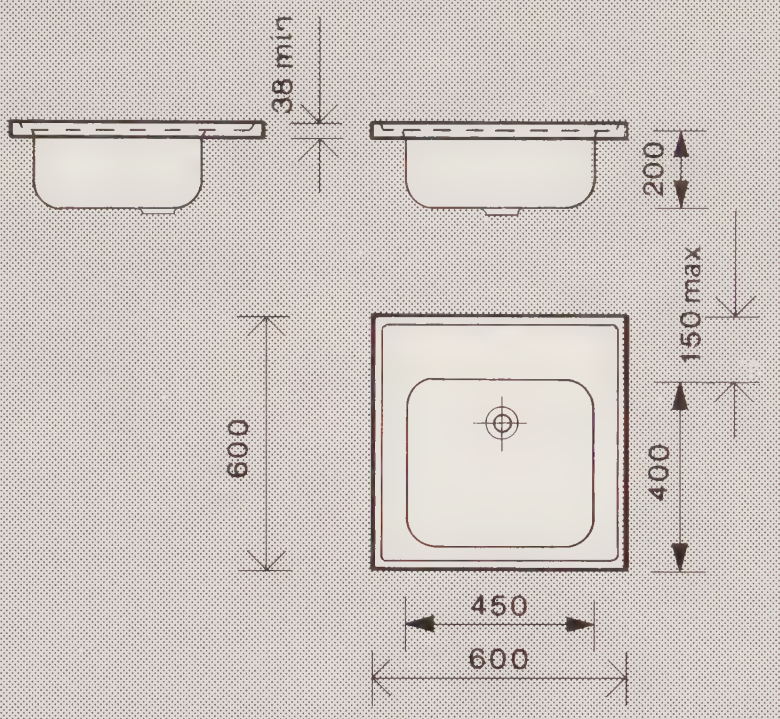
Install with outlet to front for ease of access to waste.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

SK/1 Single Bowl Sink





Identification

Sink bowl.

Standards

Stainless steel - type 304 S16	BS 1449:Part 2
Metal sinks for domestic services:-	BS 1244:Part 2

Description

A rectangular stainless steel sink bowl (min 20 swg) with no tap holes, no overflow, no upstand, edges rimmed and turned down.
Concealed fixing clips.
All exposed stainless steel finished No. 3B; outside of bowl finished bead blast.
Earthing terminal.

Options

Tap holes.
Stainless steel brackets for wall mounting.
Stainless steel support framework.
Galvanised steel support framework.
Sink bowls may be located in stainless steel worktops, as shown in HTMs 62 and 63.
Front edge profiles may be square as illustrated or with roll front edge (and upstand at rear) to suit profile shown in HTMs 62 and 63.
650 deep when matching HTM 63 profile.
Stainless steel hinged grid when used as a bucket sink.
Sinks may be manufactured with integral worktops from cast resins, sold surfacing materials or stainless steel to sizes and profiles as shown in HTM67.

Application

For use with concealed services; use with wall mounted supply fittings.
Use option with tap holes when supply pipework is surface mounted below sink.
Suitable for mounting on base unit, wall brackets or stand support.

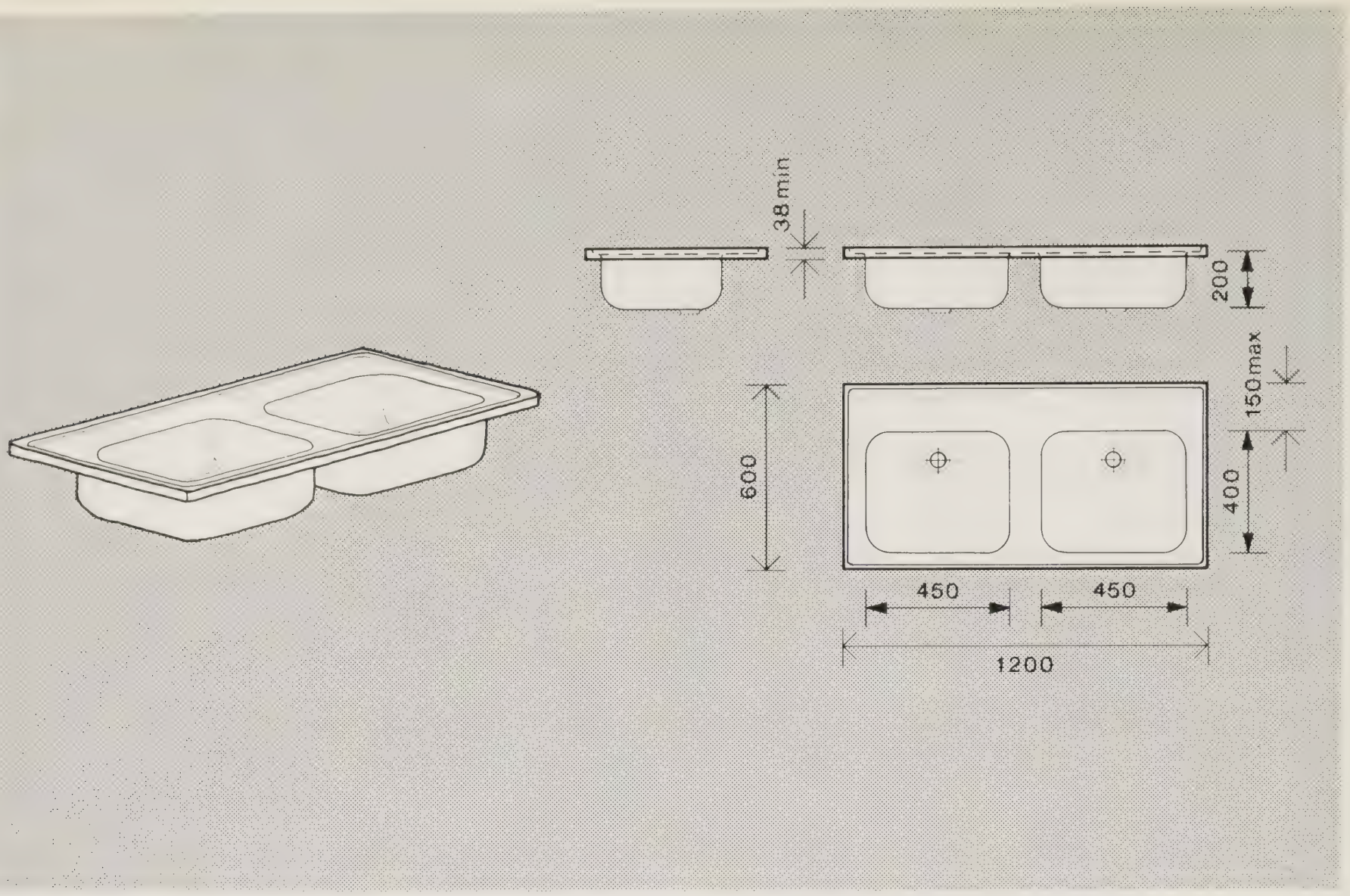
Fixing/Installation

Set on base and secure with fixing clips.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, no sharp edges.

SK/2 Double Bowl Sink



Identification

Double sink bowl.

Standards

Stainless steel - type 304 S16	BS 1449:Part 2
Metal sinks for domestic services:-	BS 1244:Part 2

Description

A double rectangular stainless steel sink bowl (min 20 swg) with no tap holes, no overflow, no upstand, edges rimmed and turned down.
Concealed fixing clips.
All exposed stainless steel finished No. 3B; outside of bowl finished bead blast.
Earthing terminal.

Options

Tap holes.
Stainless steel brackets for wall mounting.
Stainless steel support framework.
Galvanised steel support framework.
Sink bowls may be located in stainless steel worktops, as shown in HTMs 62 and 63.
Front edge profiles may be square as illustrated or with roll front edge (and upstand at rear) to suit profile shown in HTMs 62 and 63.
650 deep when matching HTM 63 profile.
Sinks may be manufactured with integral worktops from cast resins, solid surfacing materials or stainless steel to sizes and profiles as shown in HTM 67.

Application

For use with concealed services; use with wall mounted supply fittings.
Use option with tap holes when supply pipework is surface mounted below sink.
Suitable for mounting on base unit, wall brackets or stand support.

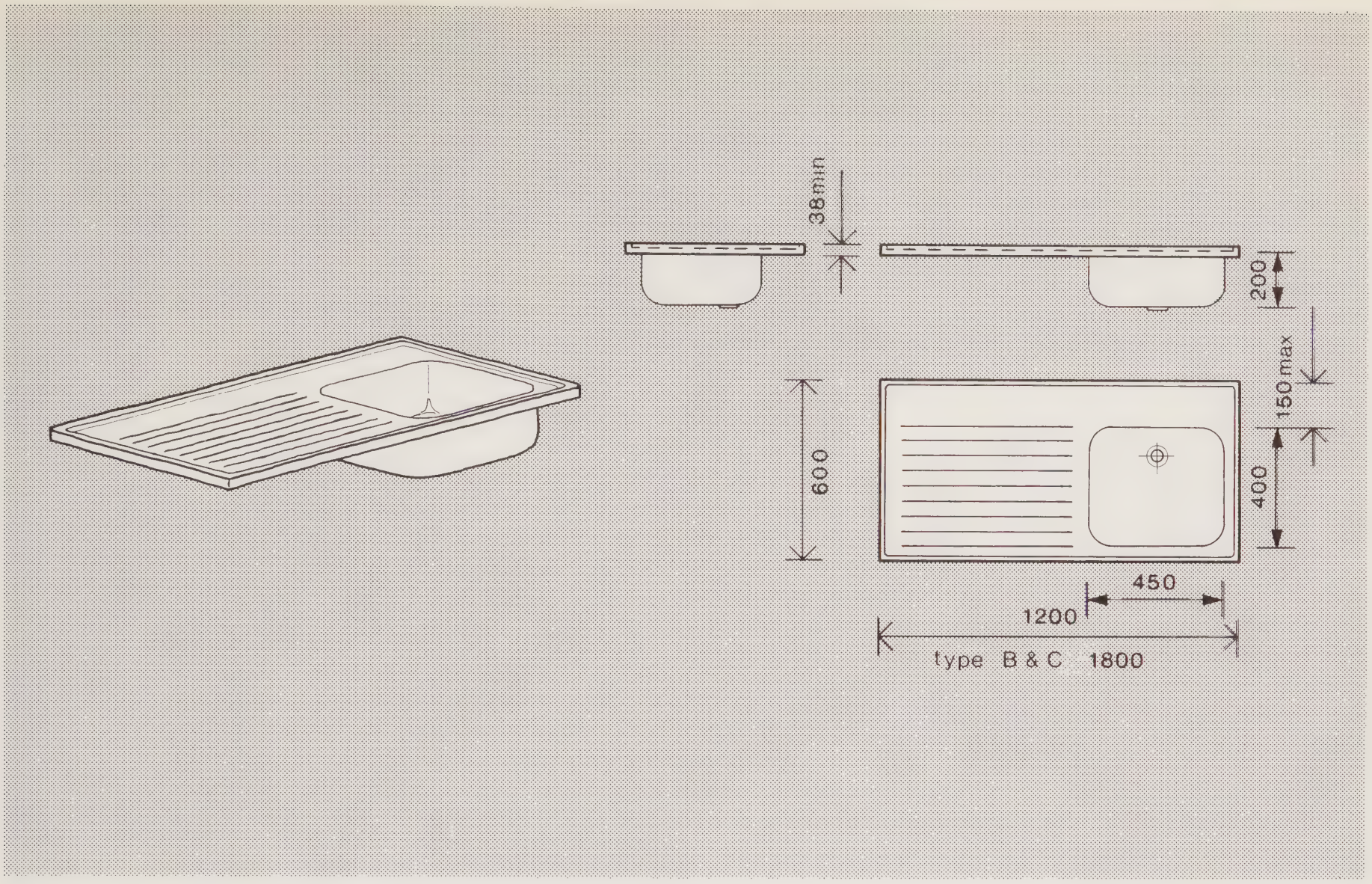
Fixing/Installation

Set on base and secure with fixing clips.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, no sharp edges.

ST/A .../B .../C Sink Tops



Identification

Sink top with integral drainer. Left hand unit (illustrated).

Standards

Stainless steel - type 304 S16	BS 1449:Part 2
Metal sinks for domestic services:-	BS 1244:Part 2

Description

A stainless steel sink top (min 18 swg) Type A with ribbed drainer, no tap holes, no overflow, no upstand, edges rimmed and turned down, incorporating a rectangular sink bowl (min 20 swg).
Underside sound deadened with smooth impermeable easily cleaned material and/or underlined with stainless steel.
Concealed fixing clips.
All exposed stainless steel finished No. 3B; outside of sink finished bead blast.
Earthing terminal.

Options

Right hand unit.
Type B single bowl and double drainer.
Type C double bowl and single drainer, right or left hand.
Tap holes.
Brackets for wall mounting.
Galvanised metal support framework.
Front edge profiles may be square as illustrated or with roll front edge (and upstand at rear) to suit profile shown in HTMs 62 and 63.
650 deep when matching HTM 63 profile.
Sink tops with intergral drainer may be manufactured with integral worktops from cast resins, solid surfacing materials or stainless steel to sizes and profiles and shown in HTM 67.

Application

For use with concealed services; use with wall mounted supply fittings.
Use option with tap holes when supply pipework is surface mounted below sink top.
Suitable for mounting on base unit, wall brackets, or stand support.

Fixing/Installation

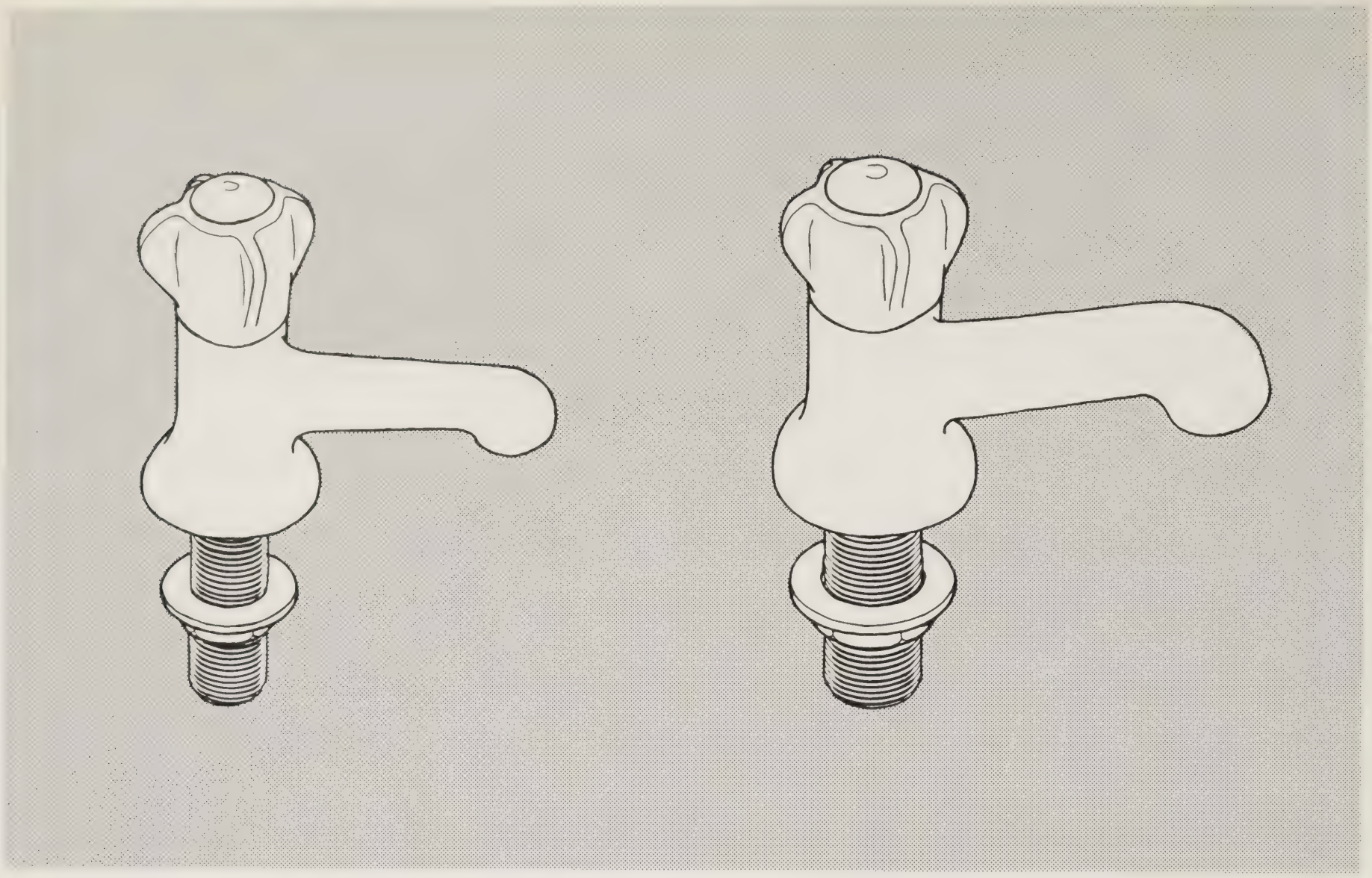
Set on base and secure with fixing clips.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned, no sharp edges.

TP1 ½in (12 mm) Pillar Tap

TP2 ¾in (18 mm) Pillar Tap



Identification
Pillar tap ½ in (12 mm).

Standards
Performance of draw-off taps with metal bodies:- BS 5412

Description
Metal pillar tap with all metal headwork and shrouded rotating top with colour disc, open nozzle with flow straightener.
Spout/body connection clear of base.
Threaded tail with brass backnut and washer.
Inlet for copper.

Options
Nozzle with aerator.
Green disc for drinking water.
Red disc for Hot: Blue disc for cold.

Application
For use in conjunction with general basins.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

Identification
Pillar tap ¾ in (18 mm)

Standards
Performance of draw-off taps with metal bodies:- BS 5412

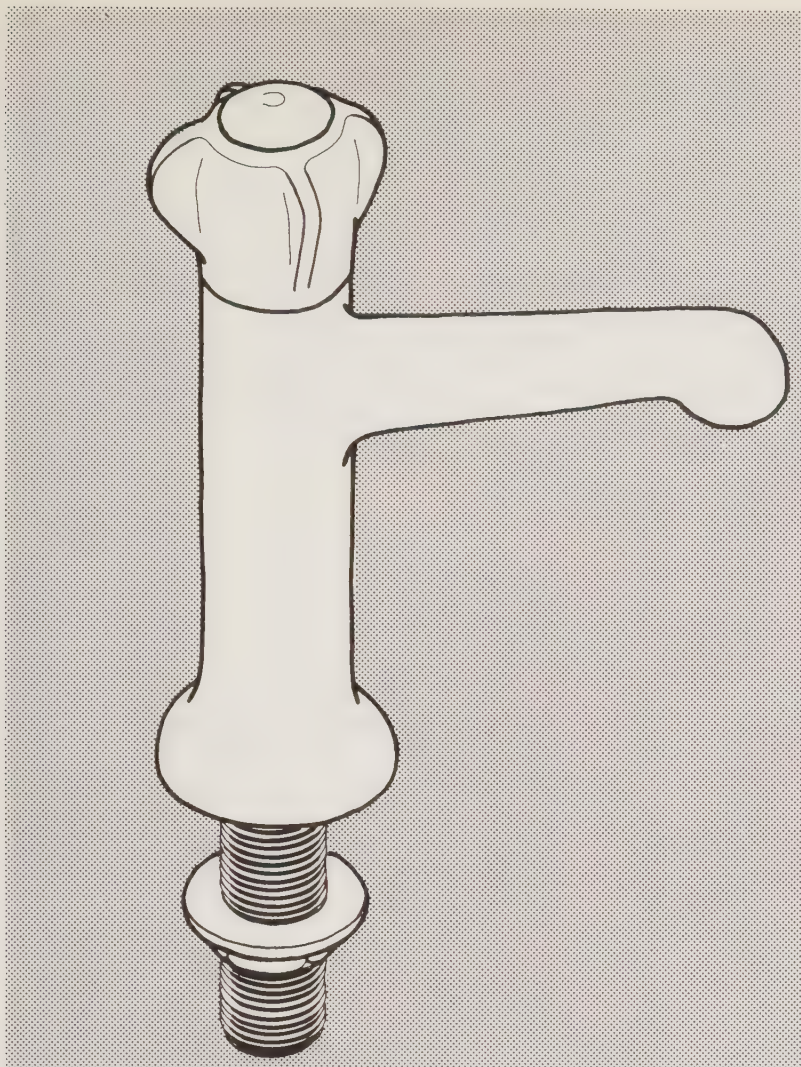
Description
Metal pillar tap with all metal headwork and shrouded rotating top with colour disc, open nozzle with flow straightener.
Spout/body connection clear of base.
Threaded tail with brass backnut and washer.
Inlet for copper.

Options
Nozzle with aerator.
Red disc for Hot: Blue disc for Cold.

Application
For use in conjunction with general baths.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TP3 ½in (12 mm) Pillar Tap High Neck



Identification
High neck pillar taps ½ in (12 mm).

Standards
Performance of draw-off taps with metal bodies:- BS 5412

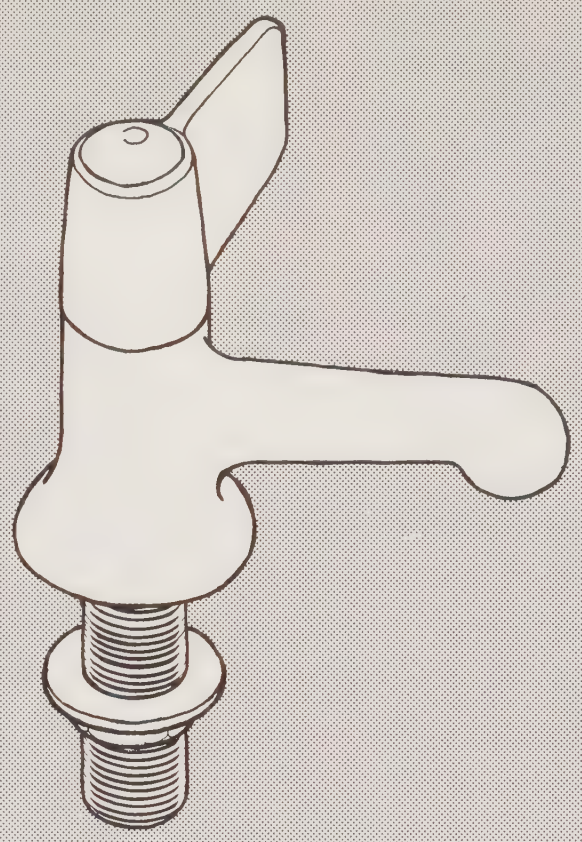
Description
Metal pillar tap with all metal headwork and shrouded rotating top with colour disc, open nozzle with flow straightener.
Spout/body connection clear of base.
Threaded tail with brass backnut and washer.
Inlet for copper.

Options
Nozzle with aerator.
Green disc for drinking water.
Red disc for Hot: Blue disc for Cold.

Application
Suitable for use in conjunction with sinks and sink tops.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TP5 ½in (12 mm) Pillar Tap Short Lever Action



Identification
Pillar tap ½ in (12 mm) inlet, short lever action.

Standards
None applicable.

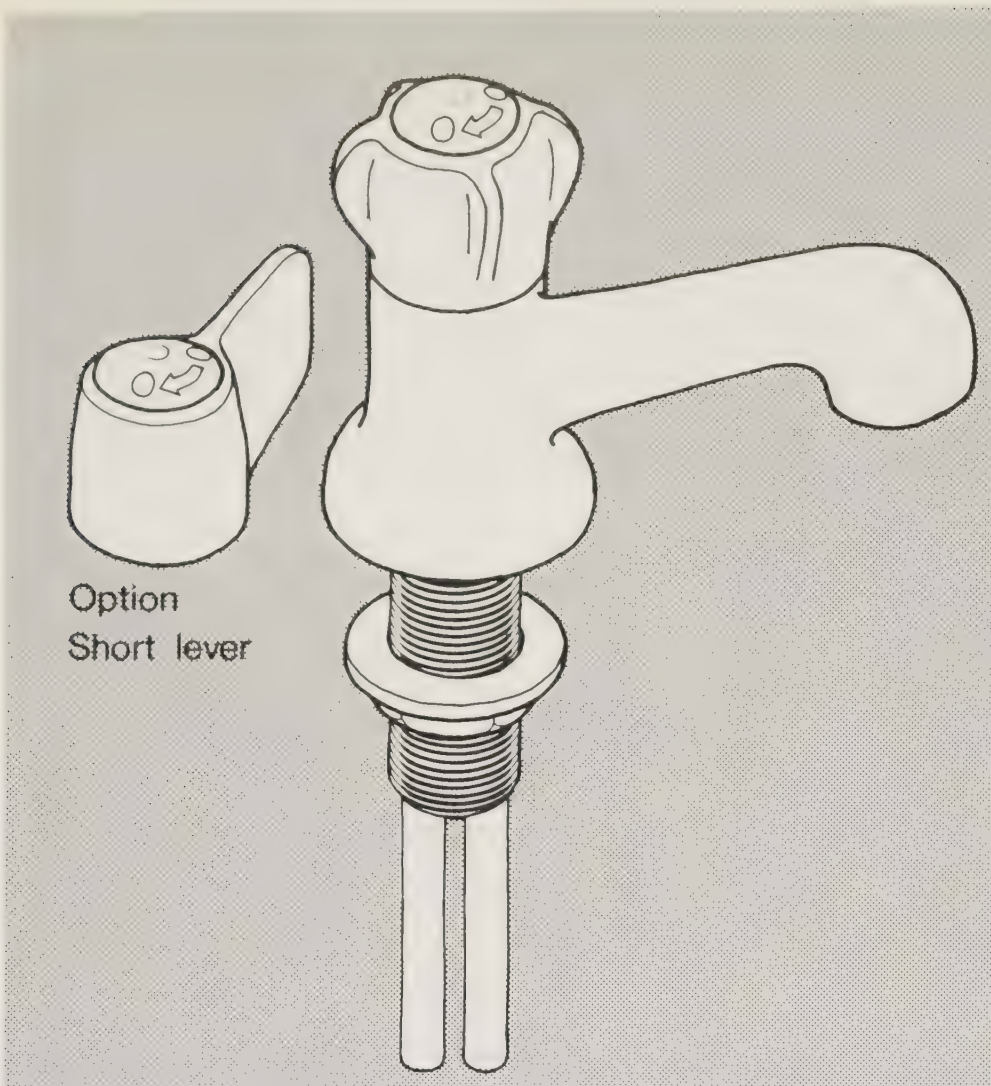
Description
Metal pillar tap with all metal headwork, shrouded quarter turn short lever action top with colour disc, and open nozzle with flow straightener.
Spout/body connection clear of base.
Threaded tail with brass backout and washer.
Inlet for copper.

Options
Nozzle for aerators.
Red disc for Hot: Blue disc for Cold.

Application
For use by the physically impaired.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TP6 Pillar Mixer Tap with Spray



Identification
Pillar mixer tap 2 x 8 mm.

Standards
None applicable.

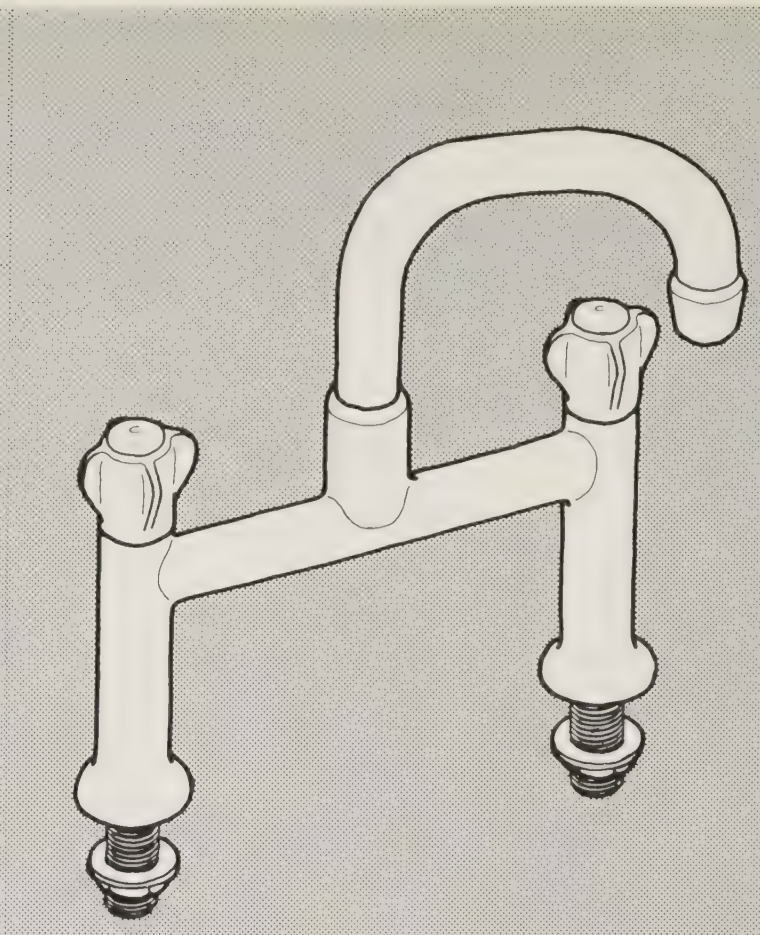
Description
Metal pillar tap with all metal headwork.
Shrouded top with progressive action from cold to hot through approximately 120 degrees.
Nozzle with single flow and spray.
Spout/body connection clear of base.
Threaded tail with brass backnut and washer.
Copper inlets.

Options
Short lever operation.

Application
Suitable for hand washing: use in conjunction with small and medium general basins.
Must only be connected to tanked supplies.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TP7 Pillar Combination Tap Assembly



Identification
Pillar combination tap assembly 2 x ½in (12 mm) inlets with swivel nozzle.

Standards
Performance of draw-off taps with metal bodies:- BS 5412

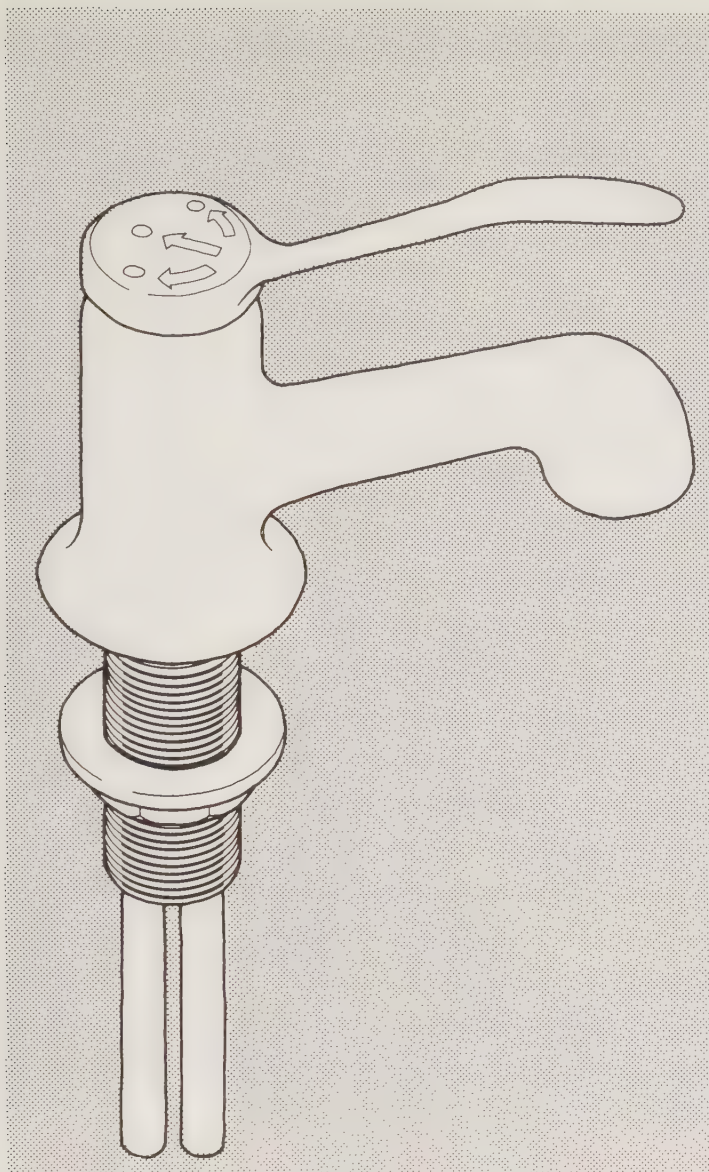
Description
Metal pillar combination tap with all metal headwork, and shrouded rotating tops, with colour discs and swivel nozzle with annular pattern divided flow and open end.
Crossbar/bodies connection clear of base.
Threaded tails with brass backnuts and washers.
Inlets for copper.

Options
None

Application
Suitable for use in conjunction with sinks.
The divided flow unit may be connected to cold mains supply.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TP8 Pillar Manual Mixer Tap Compound Lever Action with Spray



Identification

Pillar manual compound mixer lever action with spray
2 x 8mm inlets.

Standards

None applicable.

Description

Metal pillar tap with all metal headwork.
Shrouded top with ceramic disc, compound action single lever mixer. Raise lever to activate flow, turn to right for cold, left for hot. Nozzle with single flow and spray.
Spout/body connection clear of base.
Threaded tail with brass back nut and washer.
Copper inlets.

Options

Flow straightener nozzle.

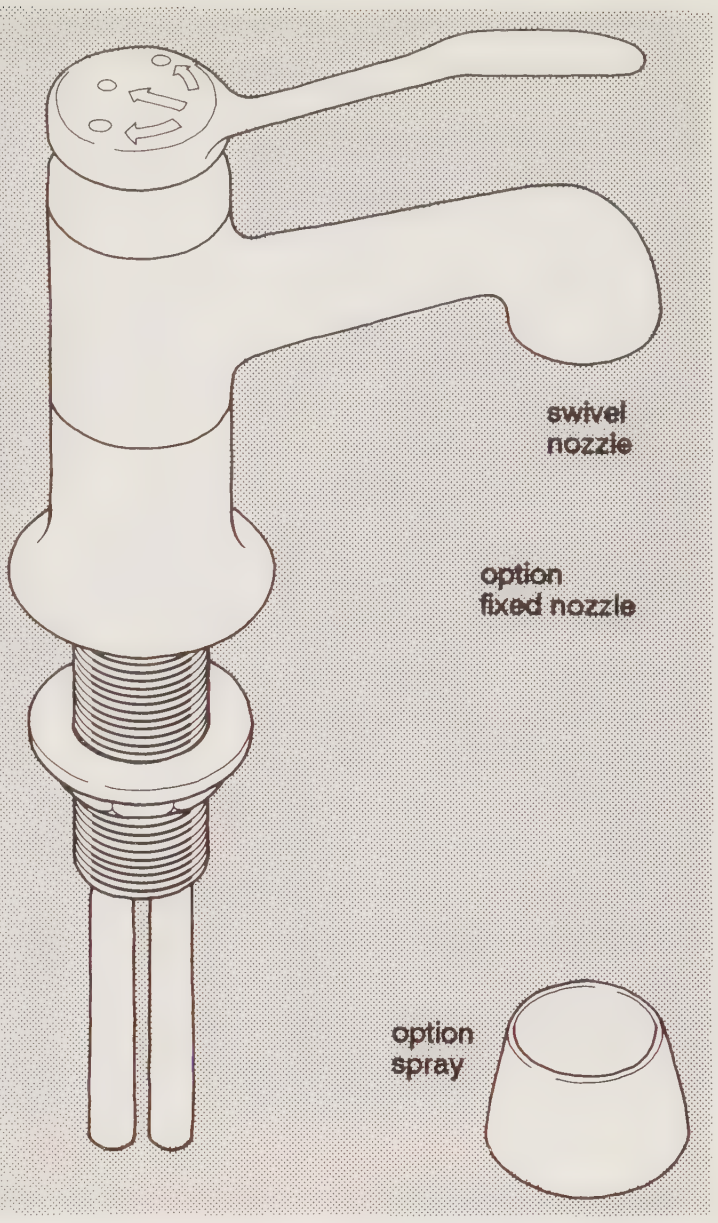
Application

Suitable for hand washing; use in conjunction with small and medium general basins. Also for use in conjunction with medium and large general basins with flow straightener for facial washing. Must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TP9 Pillar Manual Mixer Tap High Neck Compound Lever Action



Identification

High neck pillar manual compound mixer lever action
2 x 8mm inlets.

Standards

None applicable.

Description

Metal high neck pillar tap with all metal headwork.
Shrouded top with ceramic disc, compound action single lever mixer. Raise lever to activate flow, turn to right for cold, left for hot. Swivel nozzle with single flow and flow straightener.
Spout/body connection clear of base.
Threaded tail with brass back nut and washer.
Copper inlets.

Options

Fixed nozzle.
Spray.

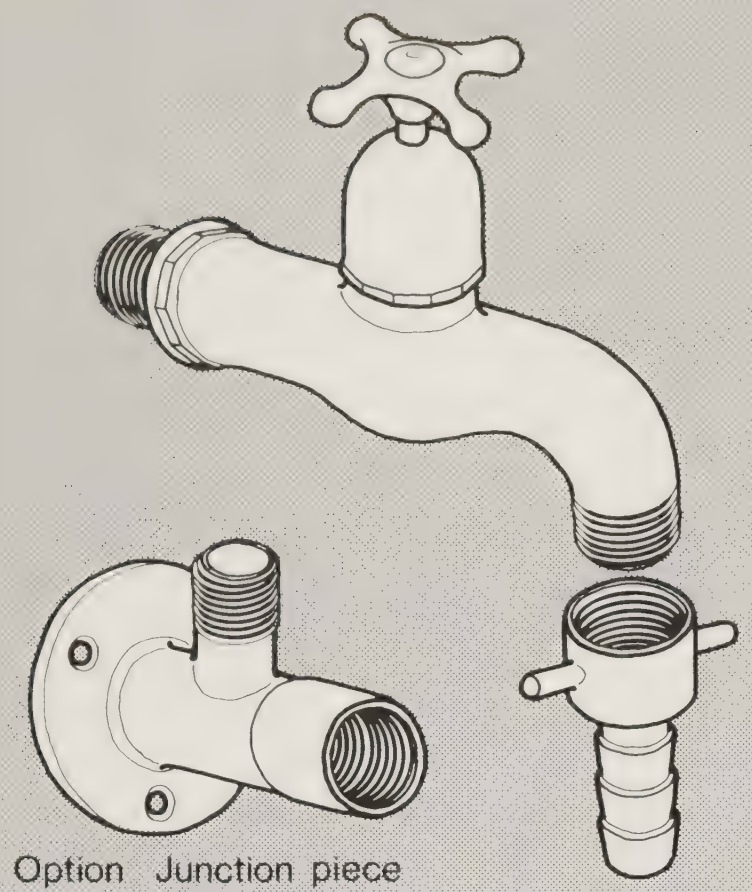
Application

Suitable for use in connection with sinks and sink tops.
Note: must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB1 ½ in (12 mm) Bib Tap with Hose Union



Identification

Bib tap ½ in (12 mm) inlet with hose union.

Standards

Draw-off taps
(screw-down pattern):- BS 1010:Part 2

Description

Brass bib tap with all brass headwork, rotating top, with indicator disc, and hose union.
Threaded tail.
Inlet for copper.

Options

Junction piece with wall mounting flange.
Reinforced nylon hose (length to be specified) with jet/spray nozzle and wall hook.
C on disc for cold and H on disc for hot.

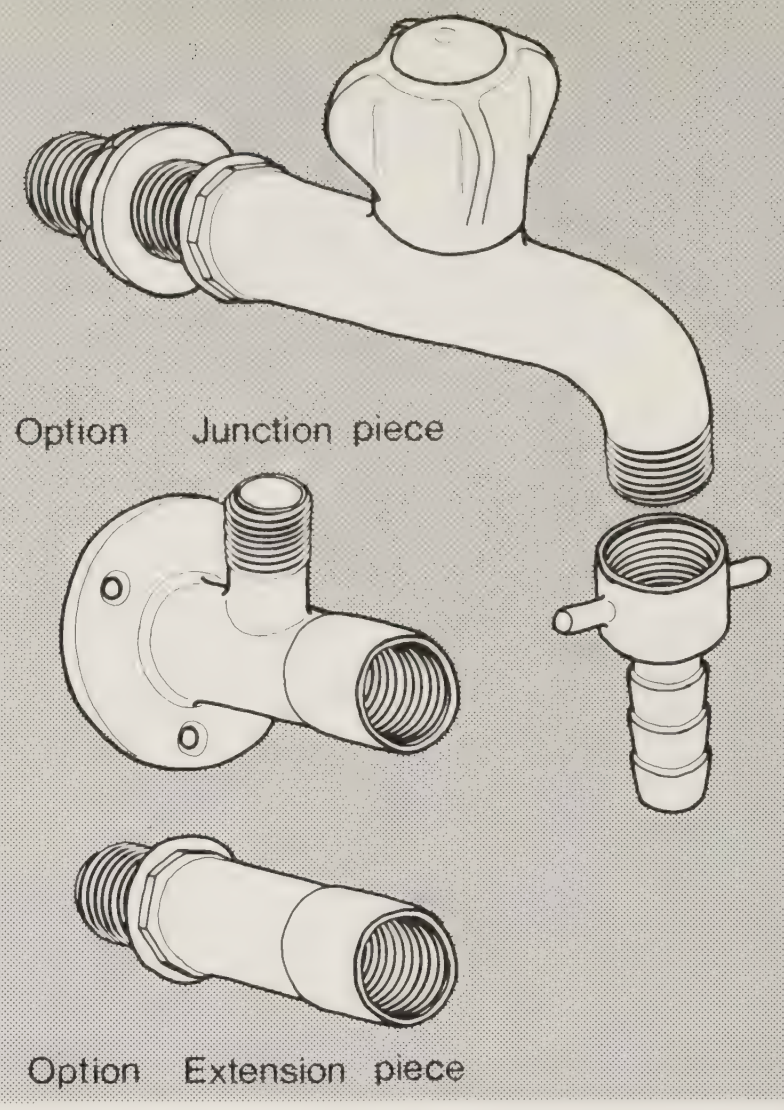
Application

Suitable for use in workshop/service areas and external locations.
Note: This fitting must not be connected to mains supply pipework unless protected against back siphonage by an anti-vacuum valve.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB2 ½ in (12 mm) Bib Tap with Hose Union



Identification

Bib tap ½ in (12 mm) inlet with hose union.

Standards

Performance of draw-off
taps with metal bodies:- BS 5412
or Draw-off taps
(screwdown pattern):- BS 1010:Part 2

Description

Metal bib with all metal headwork and shrouded rotating top, with colour disc and hose union.
Threaded tail with brass backnut and washer.
Inlet for copper.

Options

Matching extension piece to give 120 mm between wall and centre line of discharge.
Junction piece with wall mounting flange.
Reinforced nylon hose, 2m long with CP jet nozzle and wall hook.
Red disc for Hot: Blue disc for Cold.

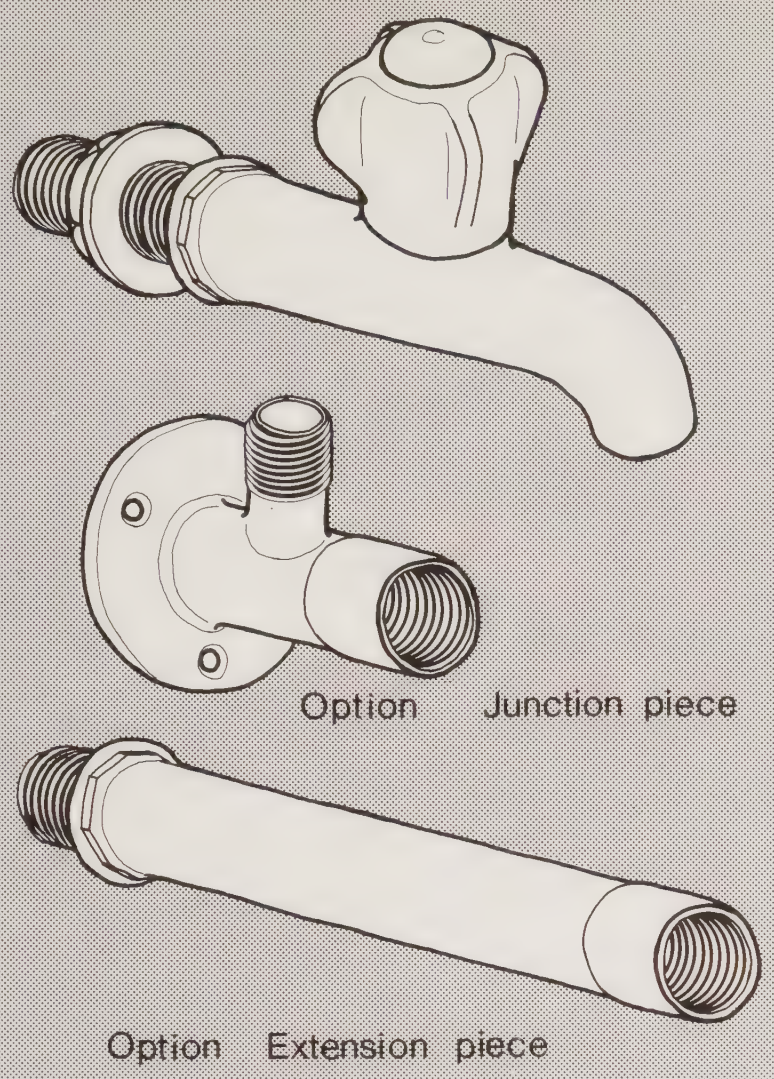
Application

Suitable for use in domestic and service areas.
Note: This fitting must not be connected to mains supply pipework unless protected against back siphonage by an anti-vacuum valve.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB3 ½ in (12 mm) Bib Tap



Identification

Bib tap ½ in (12 mm)

Standards

Performance of draw-off taps with metal bodies:- BS 5412
or Draw-off taps (screwdown pattern):- BS 1010: Part 2

Description

Metal bib tap with all metal headwork, and shrouded rotating top, with colour disc open nozzle with flow straightener.
Threaded tail with brass backnut and washer.
Inlet for copper.

Options

Matching extension piece to give 200 mm between wall and centre line of discharge.
Junction piece with wall mounting flange.
Nozzle with aerator.
Green disc for drinking water.
Red disc for Hot: Blue disc for Cold.

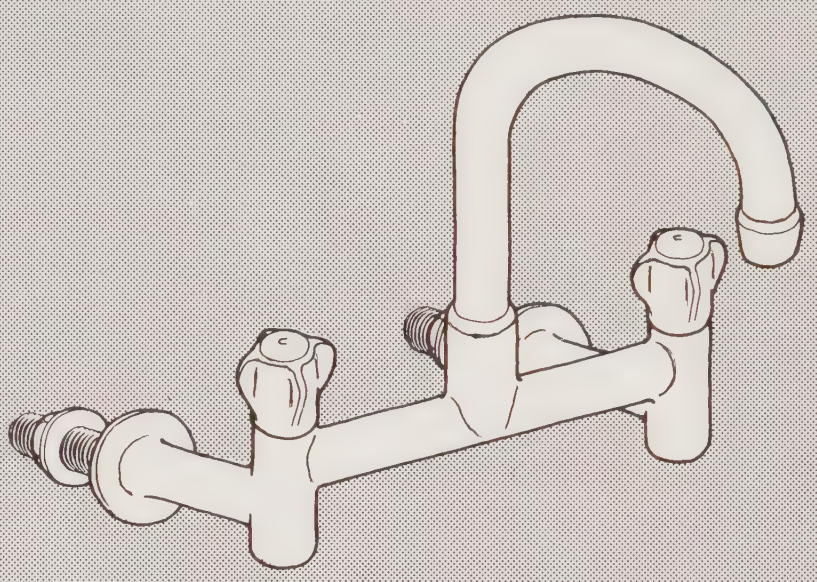
Application

Suitable for use in conjunction with floor outlets, disposal units and sinks.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB4 Bib Combination Tap Assembly



Identification

Bib combination tap assembly 2 x ½ in (12 mm) inlets with swivel nozzle.

Standards

Performance of draw-off taps with metal bodies:- BS 5412

Description

Metal bib combination tap with all metal headwork, and shrouded rotating tops with coloured discs and swivel nozzle with annular pattern divided flow and open end.
Threaded tails with brass backnuts and washers.
Inlets for copper.

Options

None.

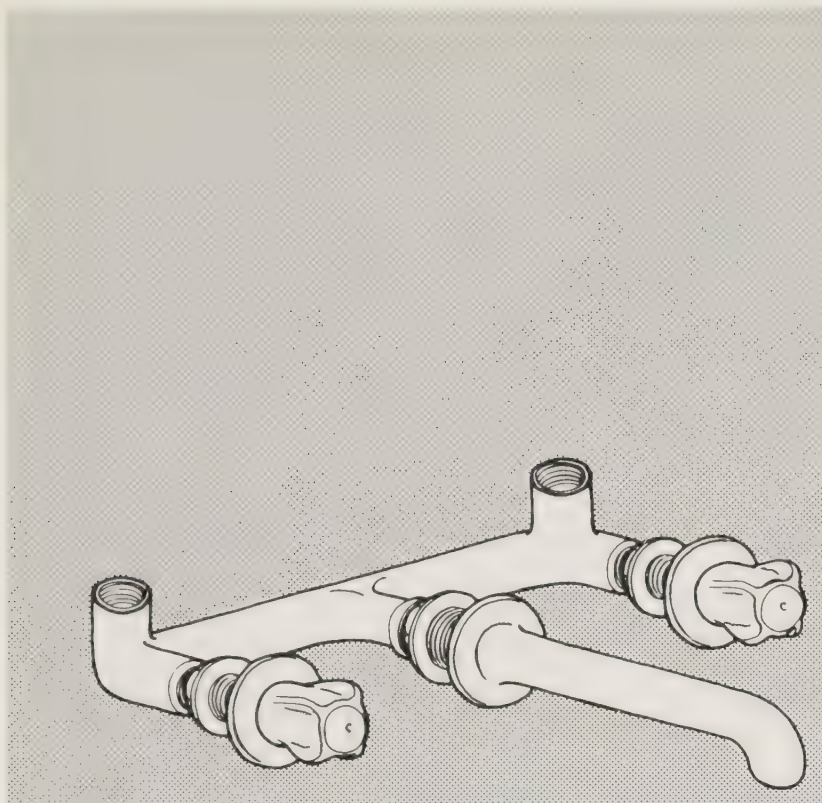
Application

The divided flow unit may be connected to cold mains supply.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB5 ½ in (12 mm) Bib Combination Tap Assembly



Identification

Bib combination tap assembly 2 x ½ in (12 mm) inlets; single flow fixed nozzle.

Standards

Performance of draw-off taps with metal bodies:- BS 5412

Description

Metal bib combination tap with all metal headwork, shrouded rotating tops with coloured discs, fixed nozzle with annular pattern divided flow and open end.
Threaded tail to valves and nozzle, metal flange plates and combination pipework with threaded inlets for mounting in duct.

Options

Hot and cold valves mounted vertically to one side.

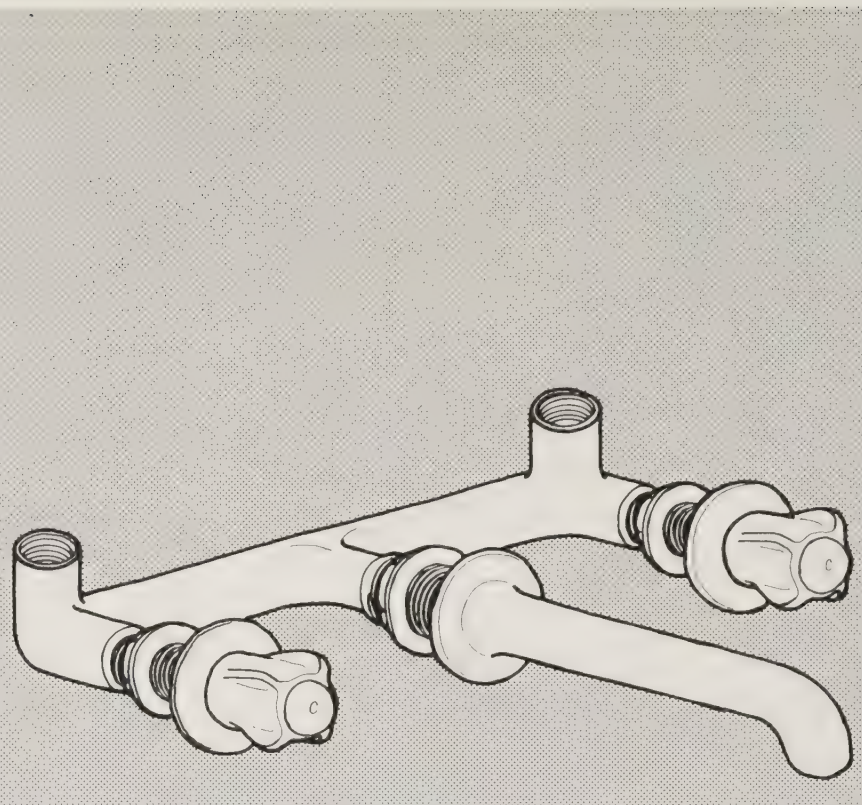
Application

Suitable for use in conjunction with disposal units, sinks and general basins.
Note: Must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB6 ¾ in (18 mm) Bib Combination Tap Assembly



Identification

Bib combination tap assembly 2 x ¾ in (18 mm) inlets; single flow, fixed nozzle.

Standards

Performance of draw-of taps with metal bodies:- BS 5412

Description

Metal bib combination tap with all metal headwork, shrouded rotating tops with coloured discs, fixed nozzle with annular pattern divided flow and open end.
Threaded tails to valves and nozzle, metal flange plates and combination pipework with threaded inlets for mounting in duct.

Options

None

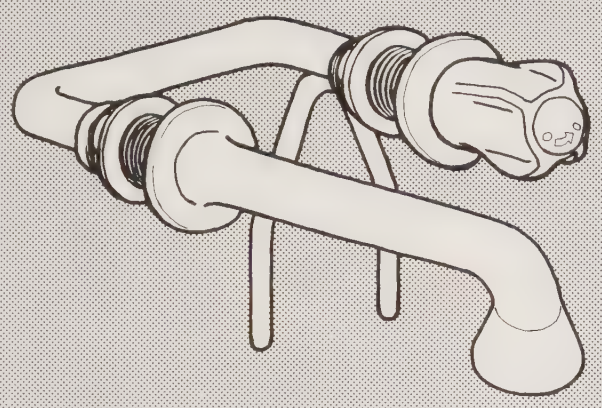
Application

Suitable for use in conjunction with hospital pattern baths and general baths with no tap holes option.
Note: Must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB7 Wall Mounted Manual Mixer Spray



Identification
Wall mounted manual mixer valve 2 x 8mm inlets and remote single flow nozzle with spray.

Standards
None applicable.

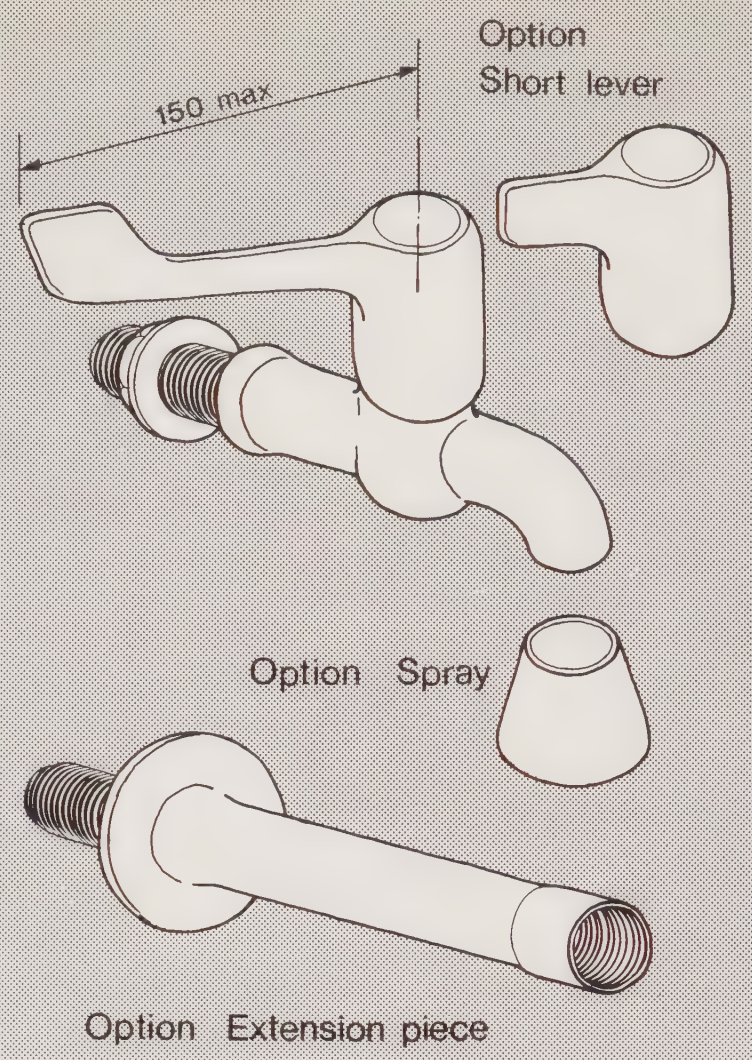
Description
Metal mixer valve with all metal headwork, shrouded rotating top with progressive action from cold to hot, and threaded tail with brass backnut and copper inlets.
Metal fixed nozzle with single flow and spray, and threaded tail with brass backnut and washer.

Options
None

Application
Suitable for use in conjunction with general basins for hand washing.
Note: Must only be connected to tanked supplies.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TB H1 ½in (12 mm) Hospital Pattern Bib Tap



Identification
Lever action bib tap ½ in (12 mm) inlet.

Standards
None applicable.

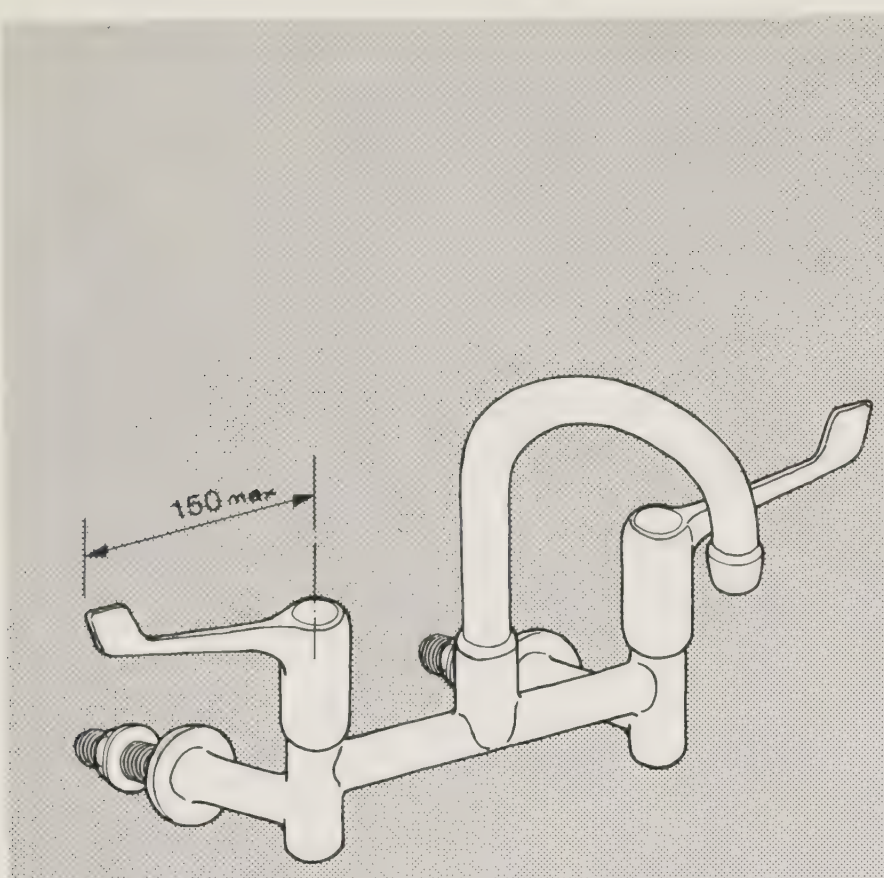
Description
Metal bib tap with all metal headwork, shrouded quarter turn lever action top with colour disc; lever parallel to wall when tap closed.
Open nozzle with flow straightener.
Threaded tail with brass backnut and washer.
Inlet for copper.

Options
Red disc for Hot: Blue disc for Cold.
Matching extension piece to give 200 mm between wall and centre line of discharge.
Spray.
Short lever pattern.

Application
Suitable for use with sinks, hospital pattern basins and scrub-up troughs.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TB H2 Hospital Pattern Bib Combination Tap Assembly



Identification

Lever action bib combination tap assembly 2 x ½ in (12 mm) inlets single flow swivel nozzle.

Standards

None applicable.

Description

Metal bib combination tap with all metal headworks, shrouded quarter turn lever action tops with coloured discs, lever parallel to wall when tap closed.
Swivel nozzle with annular pattern divided flow and open end, maximum reach of nozzle 200mm from wall.
Threaded tails with brass backnuts and washers.
Inlets for copper.

Options

None

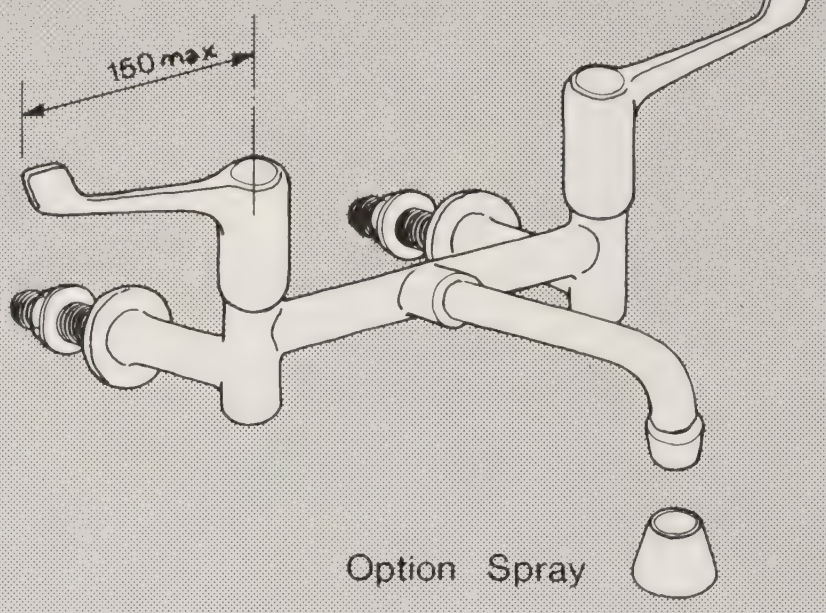
Application

Suitable for use in conjunction with hospital pattern basins, plaster sinks, sink tops and sinks.
Install so that underside of nozzle is 225mm above top of sink or basin (range is 150 to 300mm according to vessels to be filled).
Note: Must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB H3 Hospital Pattern Bib Combination Tap Assembly



Identification

Lever action bib combination tap assembly 2 x ½ in (12 mm) inlets, single flow fixed nozzle.

Standards

None applicable.

Description

Metal bib combination tap with all metal headworks, shrouded quarter turn lever action tops with coloured discs, lever parallel to wall when tap closed.
Fixed nozzle with annular pattern divided flow and open end, maximum reach of nozzle 200mm from wall.
Threaded tails with brass backnuts and washers.
Inlets for copper.

Options

Spray.

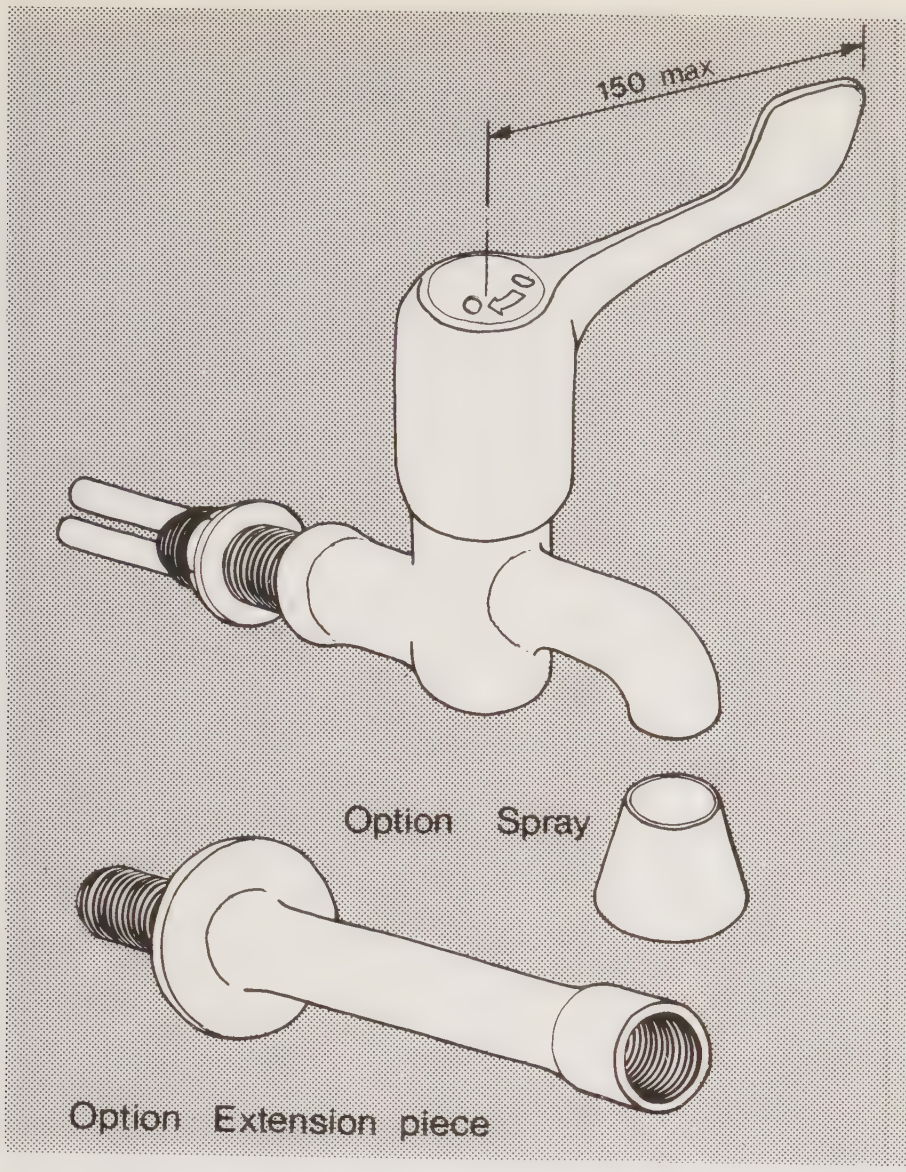
Application

Suitable for use in conjunction with disposal units and scrub-up troughs.
Note: Must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB H4 Hospital Pattern Bib Thermostatic Mixer



Identification

Thermostatic lever action bib mixer tap 2 x 8 mm inlets.

Standards

None applicable.

Description

Metal thermostatic mixer valve with shrouded quarter turn lever action top with progressive action from cold to hot; lever parallel to wall when tap closed.
Nozzle with single flow and flow straightener.
Threaded tail with brass backnut and washer.
Copper inlets.

Options

Spray.
Matching extension piece to give 200 mm between wall and centre line of discharge.

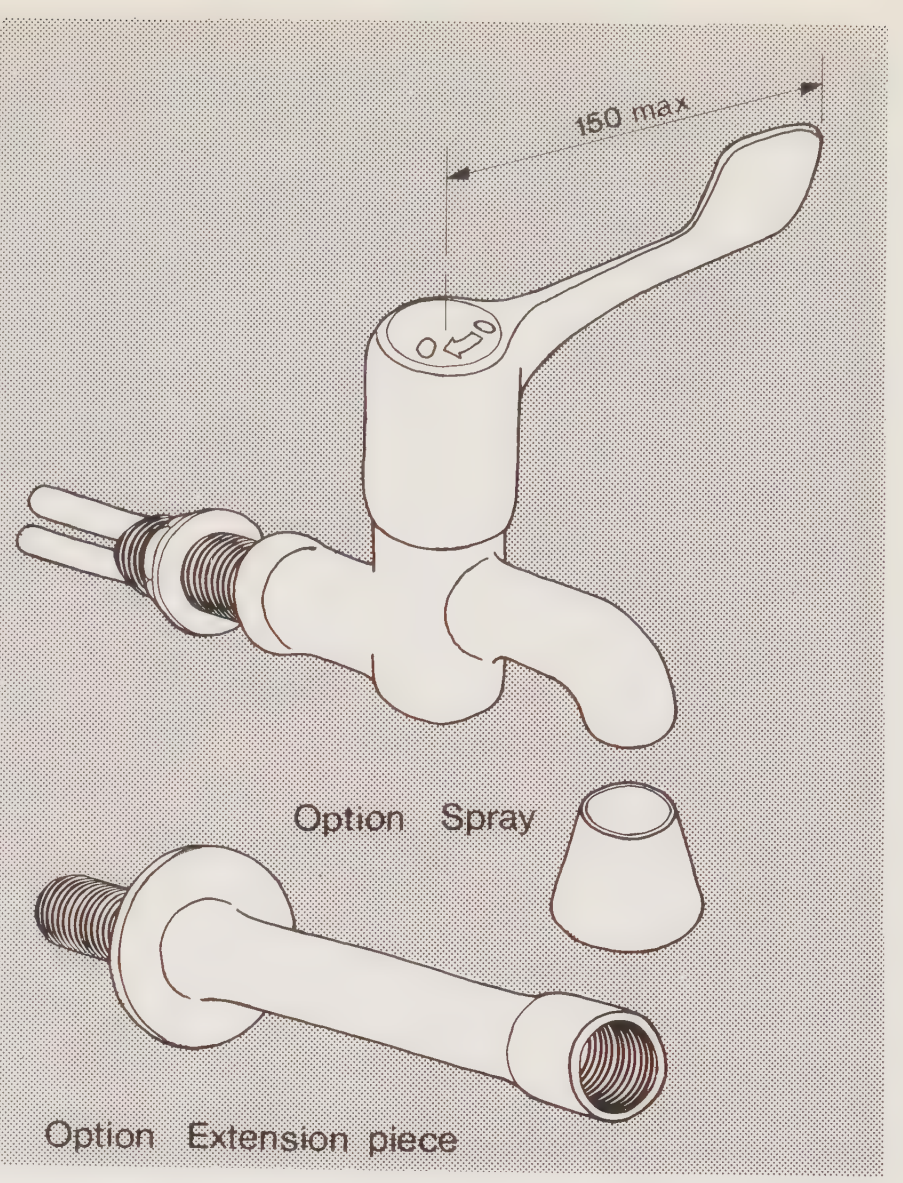
Application

Suitable for use in conjunction with general and hospital pattern basins and scrub-up troughs.
Note: Must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB H5 Hospital Pattern Bib Manual Mixer



Identification

Manual lever action bib mixer tap 2 x 8 mm inlets.

Standards

None applicable.

Description

Metal manual mixer valve with shrouded quarter turn lever action top with progressive action from cold to hot; lever parallel to wall when tap closed.
Nozzle with single flow and flow straightener.
Threaded tail with brass backnut and washer.
Copper inlets.

Options

Spray.
Matching extension piece to give 200 mm between wall and centre line of discharge.

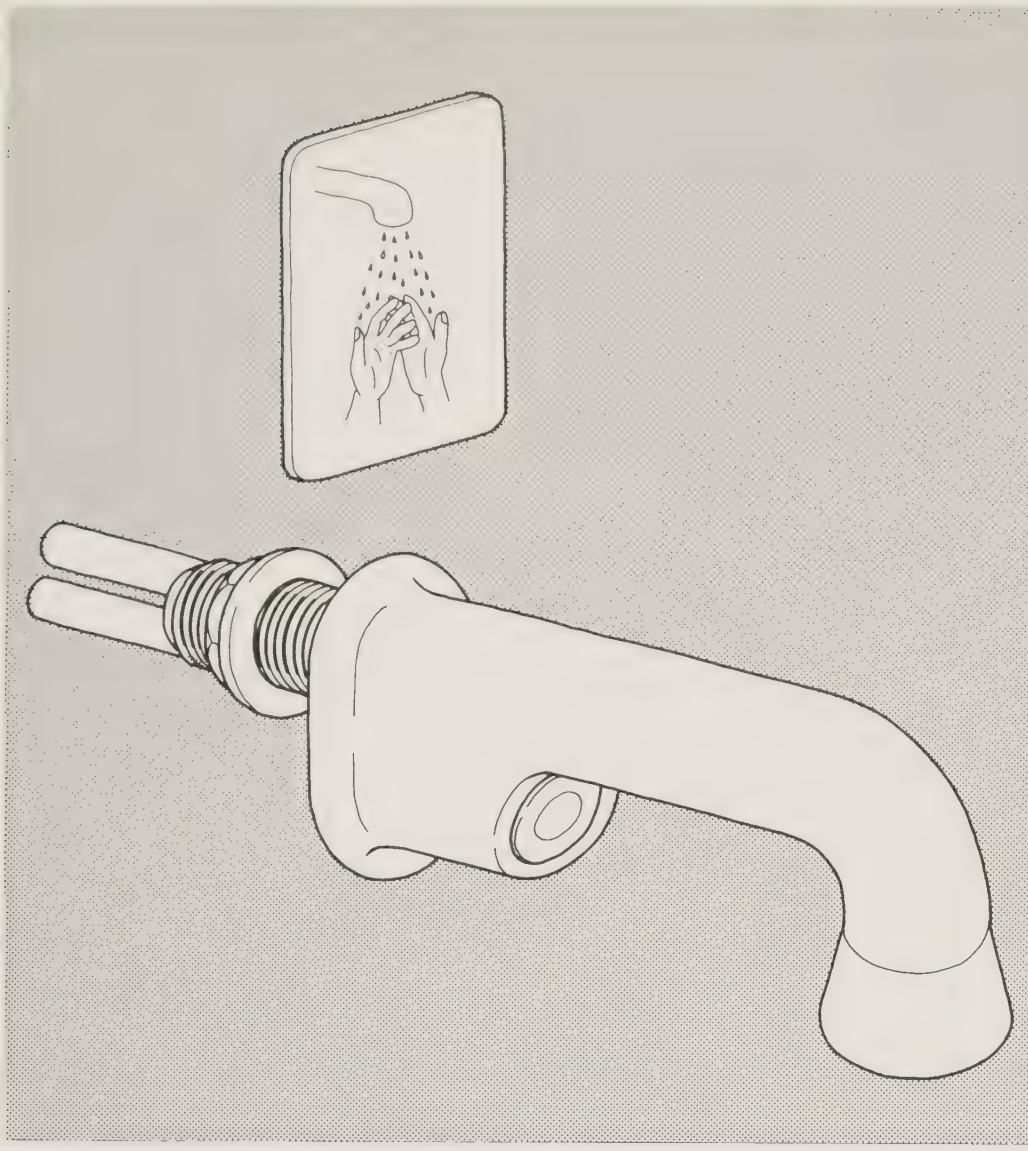
Application

Suitable for use in conjunction with general and hospital pattern basins and scrub-up troughs.
Note: Must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TB H6 Hospital Pattern Bib Thermostatic Mixer Automatic Action



Identification

Thermostatic automatic action bib mixer tap
2 x 8 mm inlets

Standards

None applicable.

Description

Metal thermostatic mixer valve with proximity sensor switch by infra red beam below fixed nozzle. Nozzle with single flow and spray.
Threaded tail with brass back nut and washer.
Copper inlets.

Options

Flow straightener nozzle.

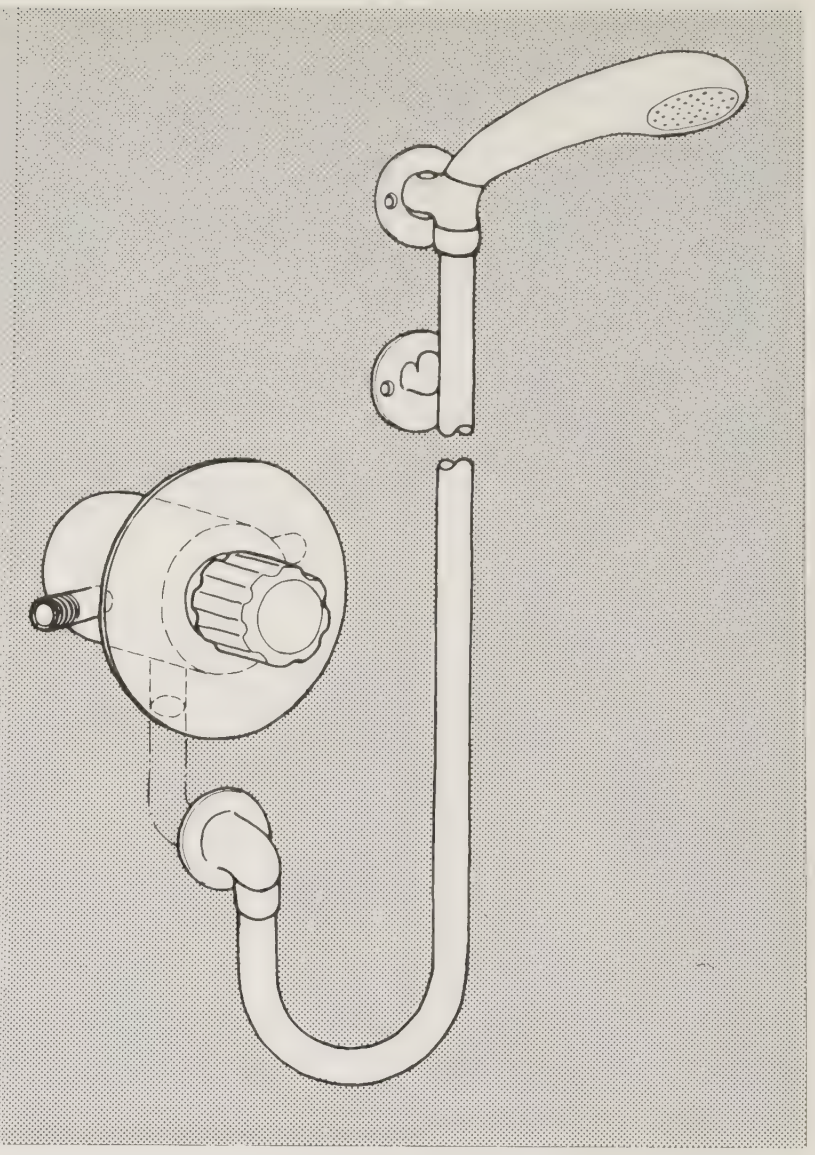
Application

Suitable for use in conjunction with general and hospital pattern basins and scrub-up trough.
Note: must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

MM1 Wall Mounted Manual Mixer Shower



Identification

Wall mounted manual mixer valve with 2 x 12/15 mm inlets and remote single flow flexible hose with handset spray.

Standards

Manual mixer valves:-	BS 1415:Part 1
Specification for shower heads:-	BS 6340:Part 4

Description

Metal mixer valve with shrouded rotating top(s) with control of temperature and volume.
Metal outlet with smooth reinforced nylon hose (limit length to negate immersion in bath water) with single flow plastics handset spray with wall attachments.
Threaded tails to valve and outlet with brass backnut and washer.
Copper inlets.

Options

Wall mounted bar with adjustable holder for handset.

Application

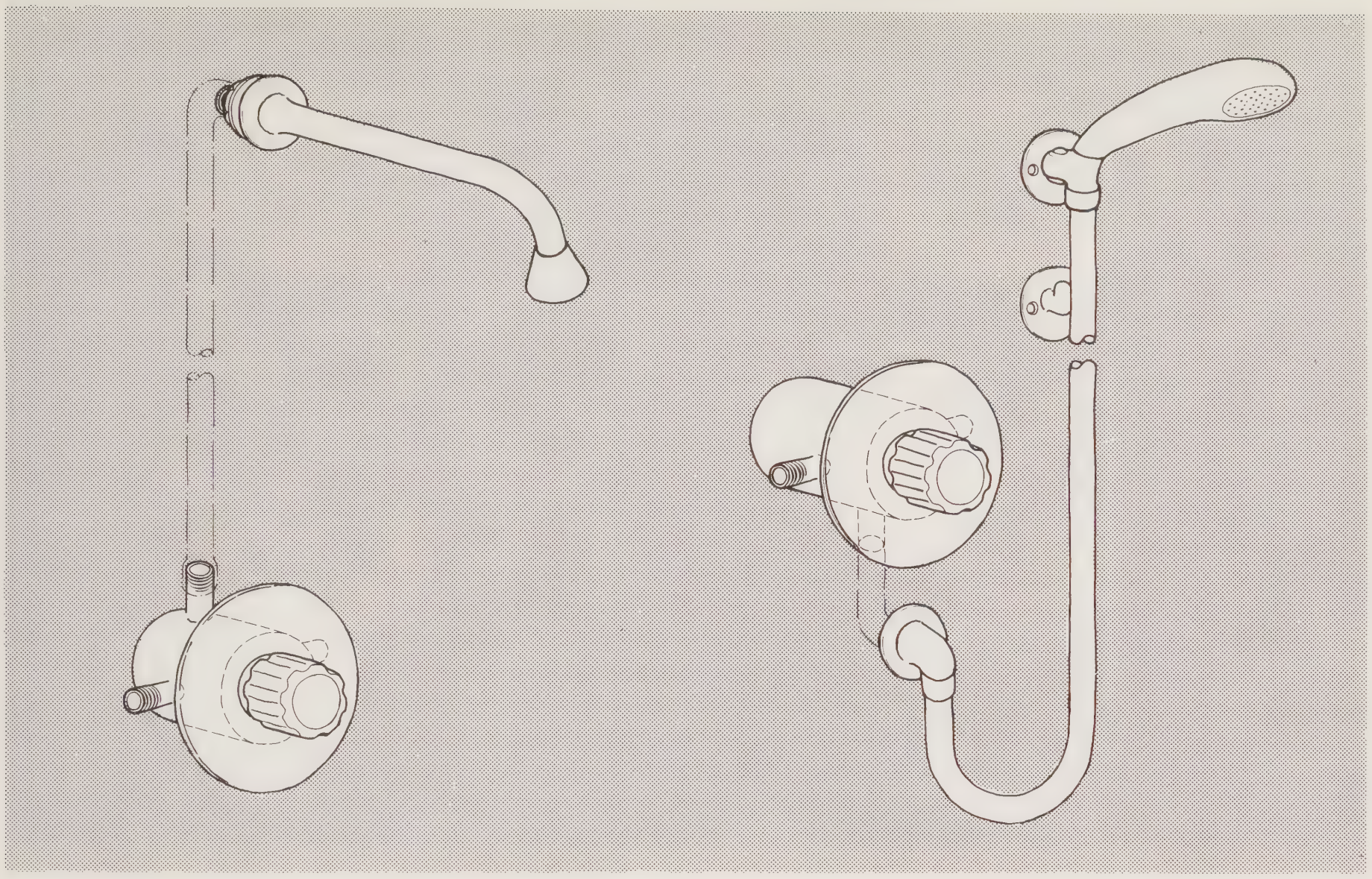
Suitable for use in conjunction with staff baths and shower receivers.
Note: Must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

MM2 Wall Mounted Manual Mixer Shower

TM1 Wall Mounted Thermostatic Mixer Shower



Identification

Wall mounted manual mixer valve with 2 x 12/15 mm inlets and remote single flow fixed outlet with adjustable spray and nozzle.

Standards

Manual mixer valves:-	BS 1415:Part 1
Specification for shower heads:-	BS 6340:Part 4

Description

Metal mixer valve with shrouded rotating top(s) with control of temperature and volume.
Metal nozzle with single flow directionally adjustable spray.
Threaded tails to valve and nozzle with brass backnut and washer.
Copper inlets.
Connecting pipework not included.

Options

None.

Application

Suitable for use in conjunction with staff baths and shower receivers.
Note: Must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

Identification

Wall mounted thermostatic mixer valve with 2 x 12/15 mm inlets with remote single flow flexible hose and handset spray.

Standards

Thermostatic mixer valves:-	BS 1415:Part 2
Specification for shower heads:-	BS 6340:Part 4

Description

Metal thermostatic mixer valve with fail safe temperature control and shrouded rotating top(s) with control of temperature and volume.
Metal outlet with smooth reinforced nylon hose (specify length for assisted baths, bidets, and hair washing) with single flow plastics handset spray with wall attachments.
Threaded tails to valve and socket with brass backnut and washer.
Copper inlets.

Options

Wall mounted bar with adjustable holder for handset.
Auto retractable hose for assisted baths.

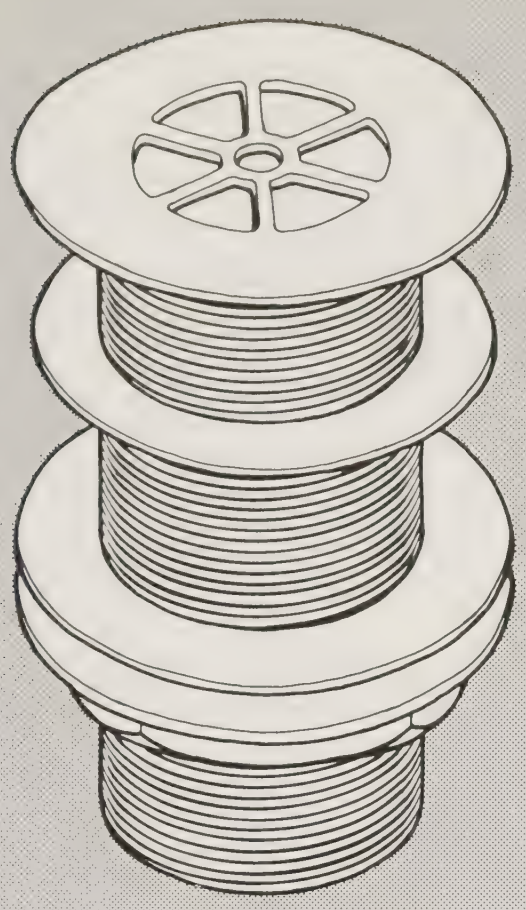
Application

Suitable for use in conjunction with hospital pattern bidets, baths, shower receivers and hair washing basins.
For use with bidets, hand set should have narrow spray pattern. Wall attachment should be mounted centrally over bidet.
Note: Must only be connected to tanked supplies.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

WT1 1¼ in (32 mm) Flush Grated Waste



Identification
1¼in (32 mm) unslotted flush grated waste CP on brass.

Standards
Wastes:- BS 3380:Part 1

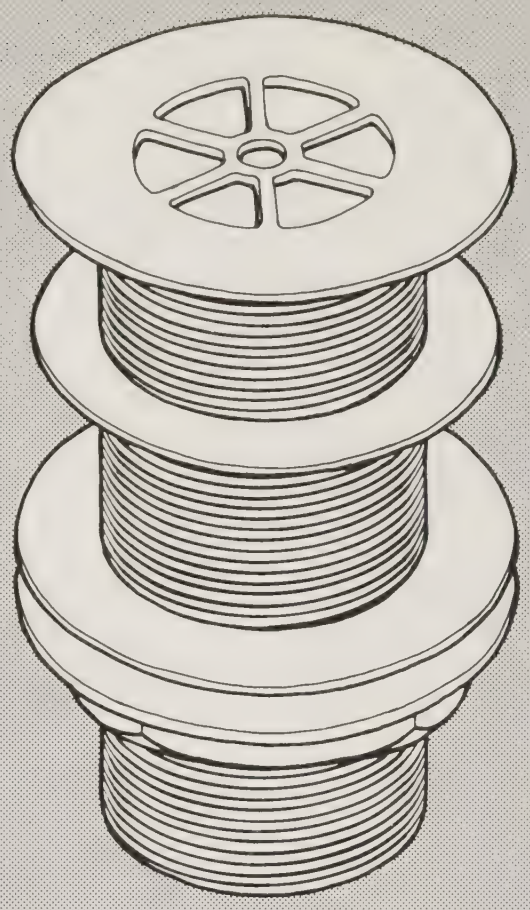
Description
All metal long waste with flush grated top: no exposed sharp arrises.
Threaded tail with brass backnut and gaskets.

Options
None.

Application
For use with basins (including hospital pattern) and hospital pattern bidets.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

WT2 1½ in (38 mm) Flush Grated Waste



Identification
1½ in (38 mm) unslotted flush grated waste CP on brass.

Standards
Wastes:- BS 3380:Part 1

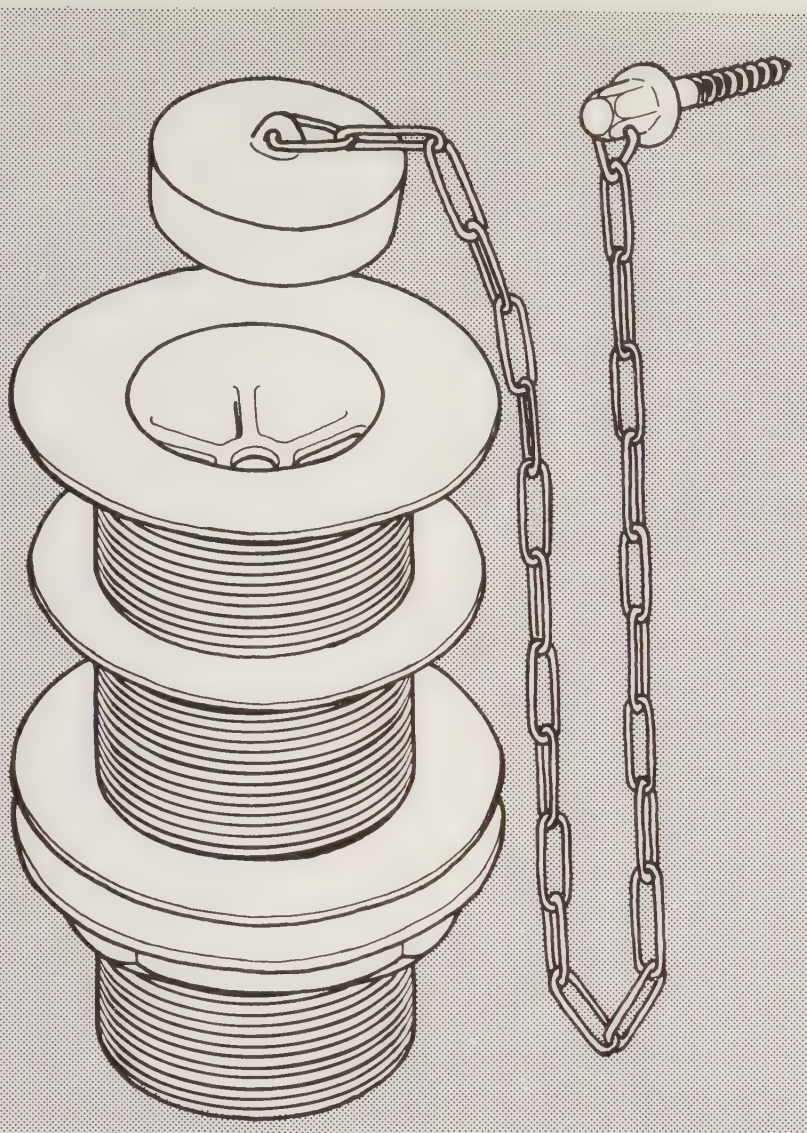
Description
All metal long waste with flush grated top: no exposed sharp arrises.
Threaded tail with brass backnut and gaskets.

Options
Polished brass (50 mm short waste).
Removable grate.

Application
For use with bottom outlet scrub-up troughs.
Use polished brass option with urinal bowls.
Use removable grate option with shower receivers.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

WT3 1¼in (32 mm) Waste with Plug and Chain



Identification

1¼ in (32 mm) unslotted recessed grated waste, CP on brass, plug with CP link chain and screw stay.

Standards

Wastes:- BS 3380:Part 1

Description

All metal long waste with recessed grate: no exposed sharp arrises.
Plug with metal link chain and screw stay.
Threaded tail with brass backnut and gaskets.

Options

None.

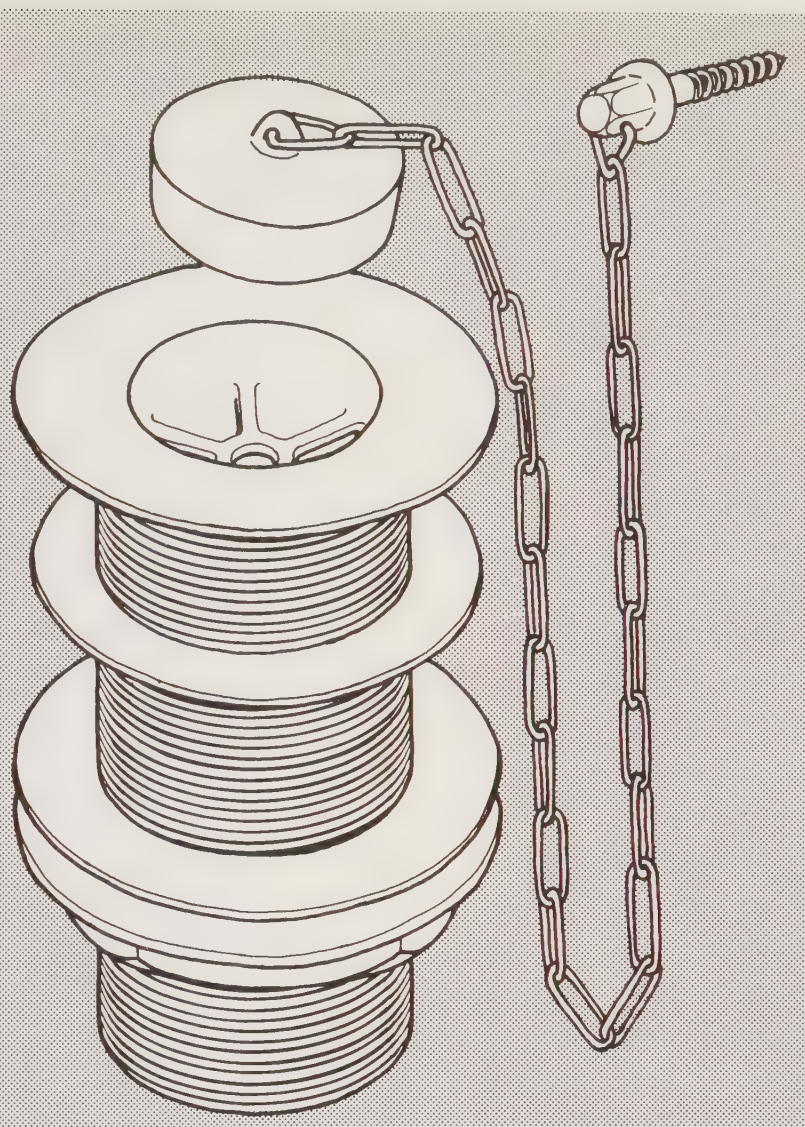
Application

For use with basins.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

WT4 1½in (38 mm) Waste with Plug and Chain



Identification

1½ in (38 mm) unslotted recessed grated waste, CP on brass, plug with CP chain and screw stay.

Standards

Wastes:- BS 3380:Part 1

Description

All metal long waste with recessed grate: no exposed sharp arrises.
Plug with metal link chain and screw stay.
Threaded tail with brass backnut and gaskets.

Options

Slotted.

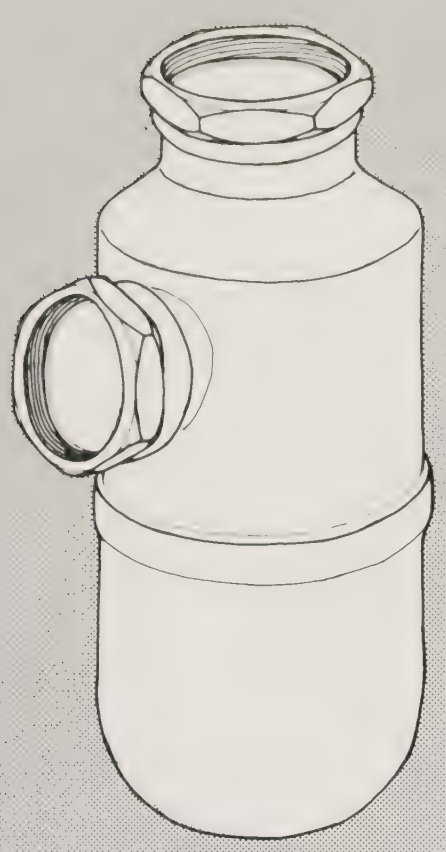
Application

For use with sinks, sink tops and baths.
Use slotted option for domestic baths.

Cleaning/Maintenance

Exposed surfaces smooth and easily cleaned.

TR1/M 1¼in (32 mm) Bottle Trap



Identification
1¼ in (32 mm) metal bottle trap.

Standards
Generally as
Copper and copper alloy traps:- BS 1184

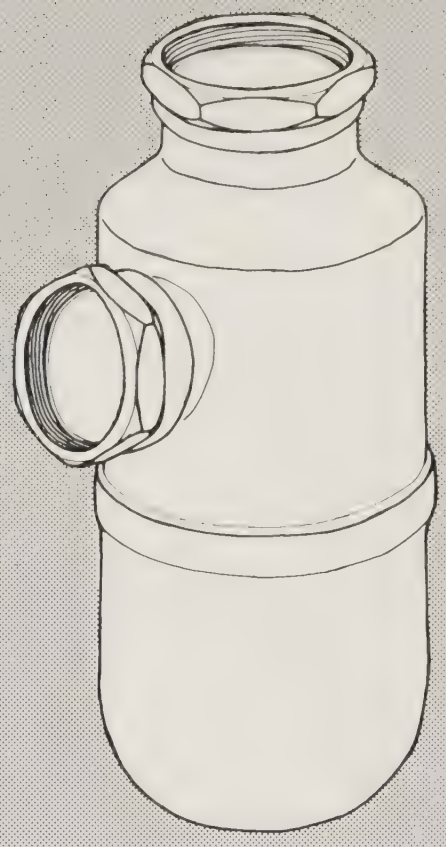
Description
'P' outlet 76 mm seal brass bottle trap with removable sump, and threaded outlet for connection to copper or plastics pipework.
Finished CP.

Options
Self coloured.

Application
For use when exposed.
Use self coloured option when concealed.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TR 2/M 1½in (38 mm) Bottle Trap



Identification
1½ in (38 mm) metal bottle trap.

Standards
Generally as
Copper and copper alloy traps:- BS 1184

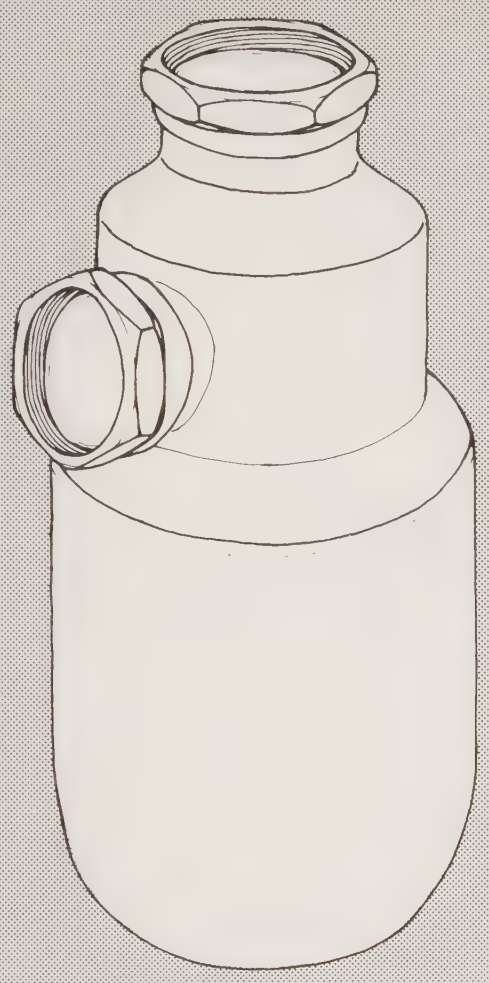
Description
'P' outlet 76 mm seal brass bottle trap with removable sump, and threaded outlet for connection to copper or plastics pipework.
Finished CP.

Options
Self coloured.

Application
For use when exposed.
Use self coloured option when concealed.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TR R1/M 1¼in (32 mm) Resealing Bottle Trap



Identification
1¼ in (32 mm) metal resealing bottle trap.

Standards
Generally as
Copper and copper alloy traps:- BS 1184

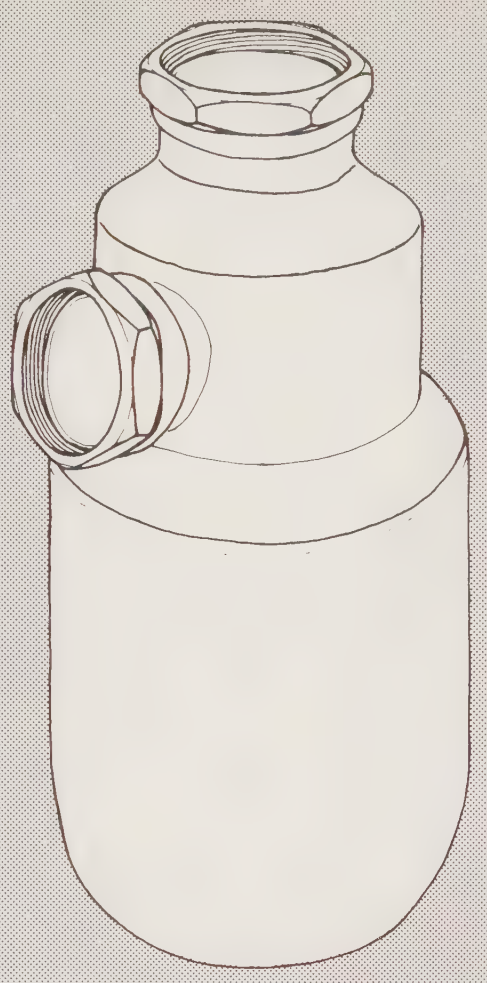
Description
'P' outlet 76 mm seal brass bottle trap with removable sump, and threaded outlet for connection to copper or plastics pipework and annular pattern resealing device.
Finished CP.

Options
Self coloured.

Application
For use when exposed on fittings connected to single stack plumbing.
Use self coloured option when concealed.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TR R2/M 1½ (38 mm) Resealing Bottle Trap



Identification
1½ in (38 mm) metal resealing bottle trap.

Standards
Generally as
Copper and copper alloy traps:- BS 1184

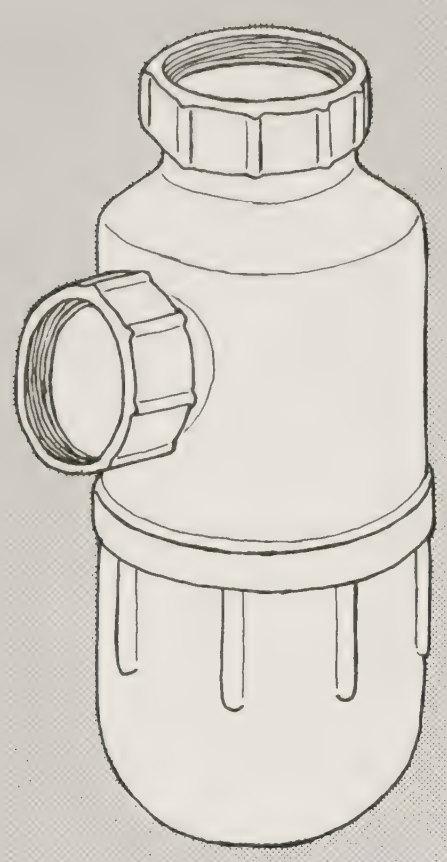
Description
'P' outlet 76 mm seal brass bottle trap with removable sump. and threaded outlet for connection to copper or plastics pipework and annular pattern resealing device.
Finished CP.

Options
Self coloured.

Application
For use when exposed on fittings connected to single stack plumbing.
Use self coloured option when concealed.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TR 1/P 1¼in (32 mm) Bottle Trap



Identification
1¼ in (32 mm) plastics bottle trap.

Standards
Generally as
plastics waste traps:- BS 3943

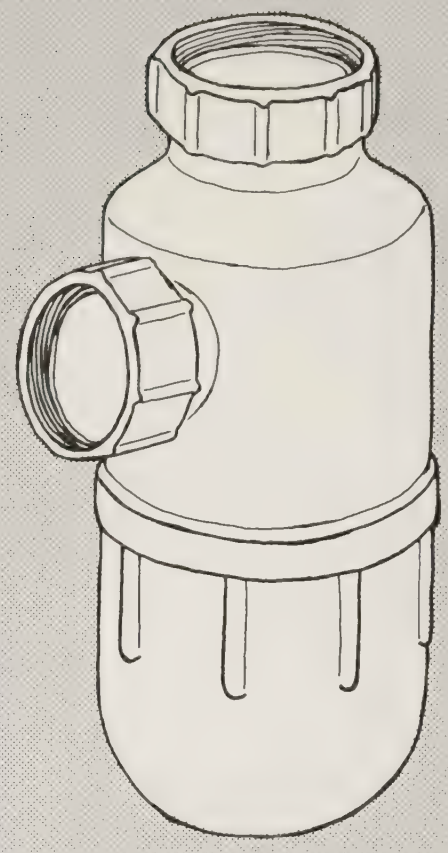
Description
'P' outlet 76 mm seal plastics bottle trap with removable sump, and threaded outlet for connection to copper or plastics pipework.
Finished CP.

Options
Self coloured.

Application
For use when exposed.
Use self coloured option when concealed.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TR 2/P 1½in (38 mm) Bottle Trap



Identification
1½ in (38 mm) plastics bottle trap.

Standards
Generally as
plastics waste traps:- BS 3943

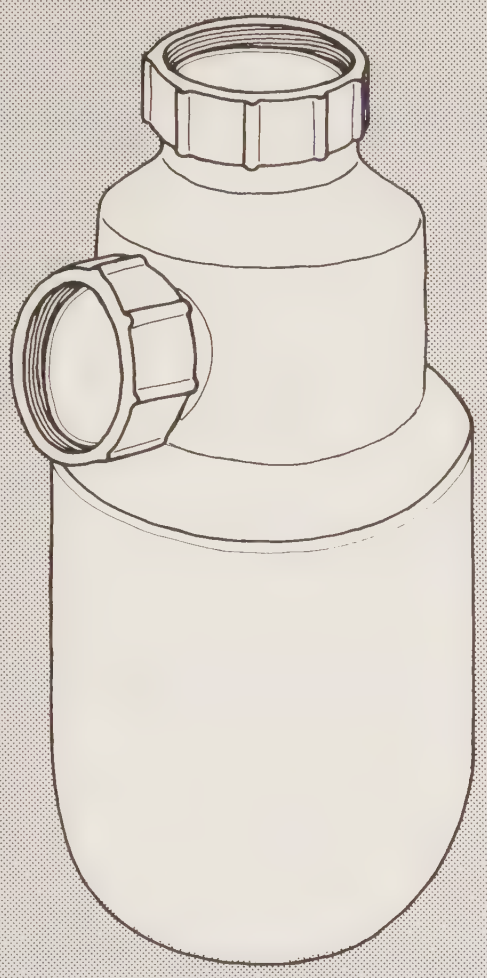
Description
'P' outlet 76 mm seal plastics bottle trap with removable sump, and threaded outlet for connection to copper or plastics pipework.
Finished CP.

Options
Self coloured.

Application
For use when exposed.
Use self coloured option when concealed.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TR R1/P 1¼in (32 mm) Resealing Bottle Trap



Identification
1¼ in (32 mm) plastics resealing bottle trap.

Standards
Generally as
plastics waste traps:- BS 3943

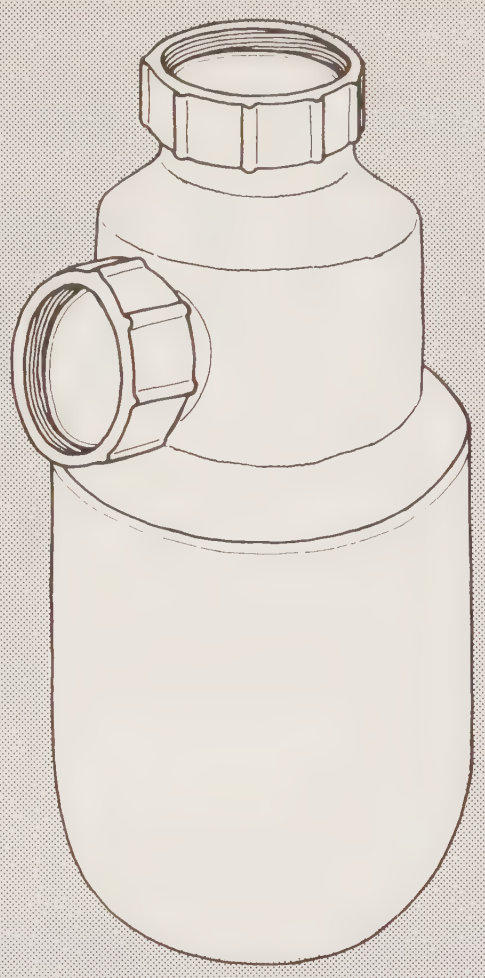
Description
'P' outlet 76 mm seal plastics bottle trap with removable sump, and threaded outlet for connection to copper or plastics pipework and annular pattern resealing device.
Finished CP.

Options
Self coloured.

Application
For use when exposed on fittings connected to single stack plumbing.
Use self coloured option when concealed.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

TR R2/P 1½in (38 mm) Resealing Bottle Trap



Identification
1½ in (38 mm) plastics resealing bottle trap.

Standards
Generally as
plastics waste traps:- BS 3943

Description
'P' outlet 76 mm seal plastics bottle trap with removable sump, and threaded outlet for connection to copper or plastics pipework and annular pattern resealing device.
Finished CP.

Options
Self coloured.

Application
For use when exposed on fittings connected to single stack plumbing.
Use self coloured option when concealed.

Cleaning/Maintenance
Exposed surfaces smooth and easily cleaned.

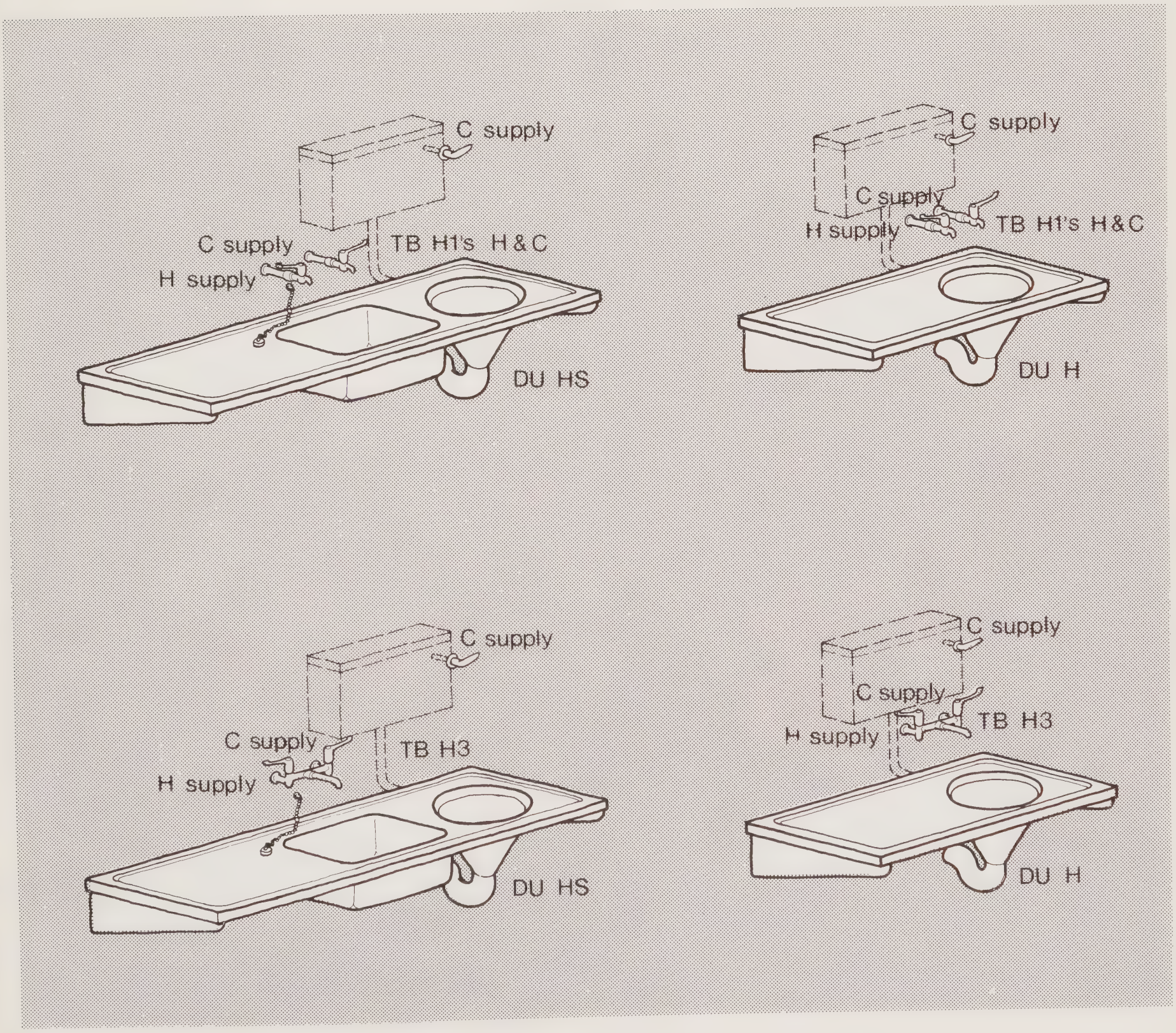
3.3 Assembly Data Sheets

	Page Number
The Disposal Unit Assemblies	
Disposal Unit Assemblies for the disposal of liquid and solid waste in connection with medical/nursing procedures	57
Disposal Unit Assemblies for the disposal of liquid and plaster waste in connection with medical/nursing procedures (or by domestic services staff)	58
Disposal Unit Assemblies for the disposal of liquid and solid waste by domestic services staff	59
Basin Assemblies	
Basin Assemblies for use in connection with medical/nursing procedures	60
Basin Assemblies for use in connection with personal washing (face, forearms and hands etc)	61
Basin Assemblies for use in connection with personal washing by seated users	62
Basin Assemblies for hand rinsing only	63
Bath Assemblies	
Bath Assembly for use in connection with assisted bathing by nursing staff	64
Bath Assemblies for use in connection with personal bathing by patients and/or staff	65
Bidet Assembly	
Bidet Assembly for use in connection with medical/nursing procedures	66
Plaster Sink Assembly	
Plaster Sink Assembly for use in connection with plaster preparation	67
Scrub-up Trough Assemblies	
Scrub-up Trough Assemblies for use in connection with Surgical washing of forearms and hands	68
Sink and Sink Top Assemblies	
Sink and Sink Top Assemblies for use in connection with nursing procedures	69
Sink and Sink Top Assemblies for use in connection with domestic services procedures	70

Disposal Unit Assemblies for the disposal of liquid and solid waste in connection with medical/nursing procedures

The essential requirements are:—

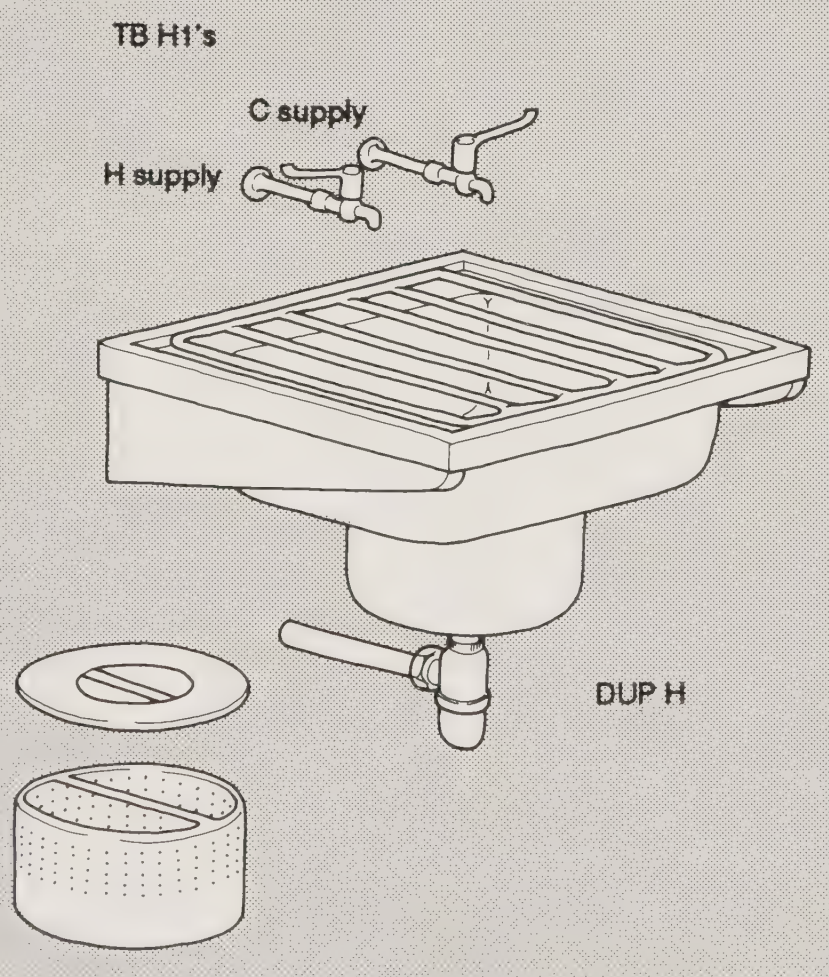
1. Hospital Pattern Basin (including cistern).
2. Hospital Pattern (lever action) taps to avoid contamination – located over sink (or hopper if no sink).
3. Separate manual control of hot and cold water.
4. Combined or separate nozzles with flow straightener.
5. Connecting to concealed services.



Disposal Unit Assemblies for the disposal of liquid and plaster waste in connection with medical/nursing procedures (or by domestic services staff)

The essential requirements are:—

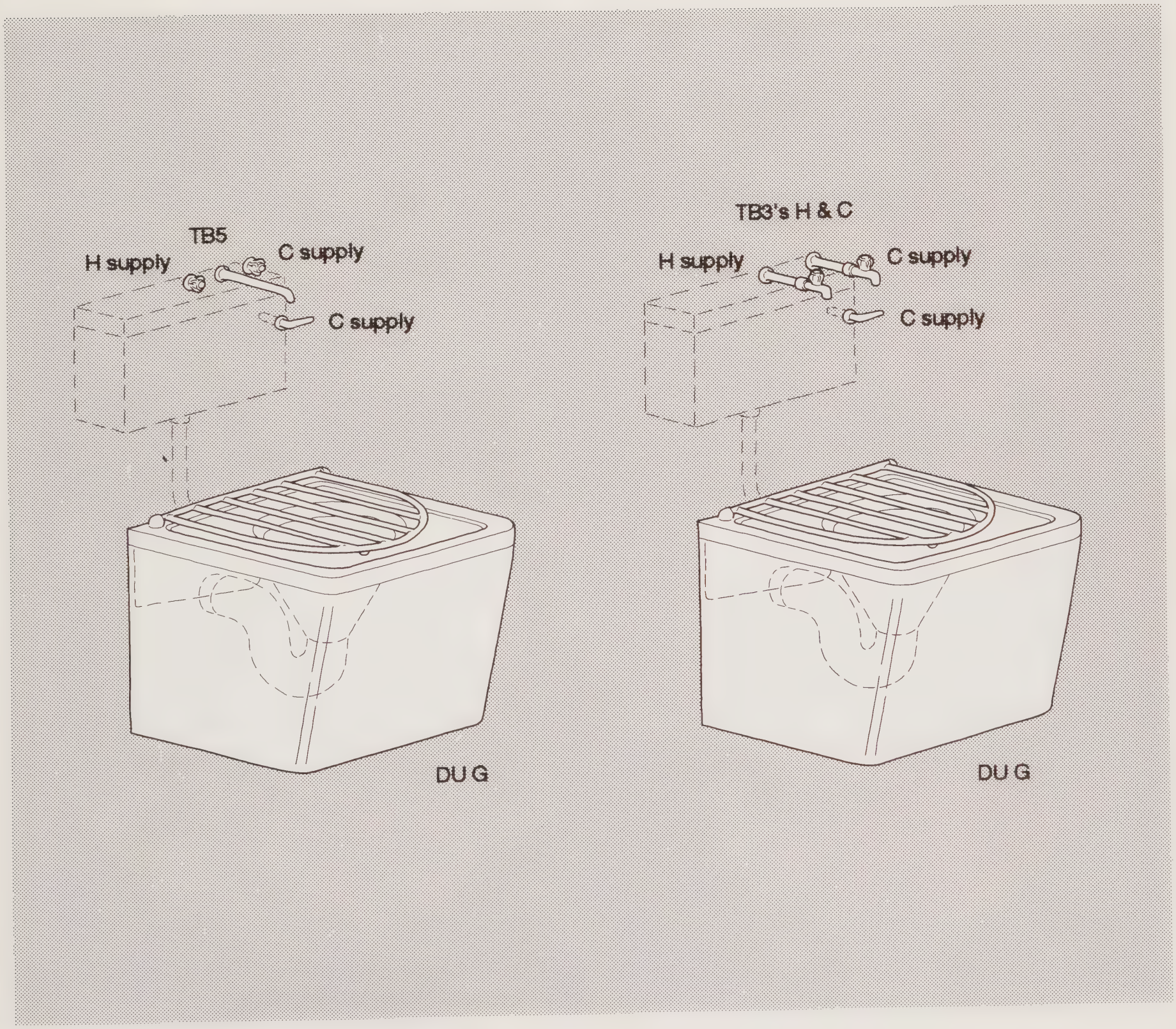
1. Hospital Pattern Disposal Unit.
2. Hospital Pattern (lever action) taps to avoid contamination.
3. Separate manual control of hot and cold water.
4. Combined or separate nozzles with flow straightener.
5. Connecting to concealed services.
6. Note: use rotating action taps with unit when in connection with domestic services procedures.



Disposal Unit Assemblies for the disposal of liquid and solid waste by domestic services staff

The essential requirements are:—

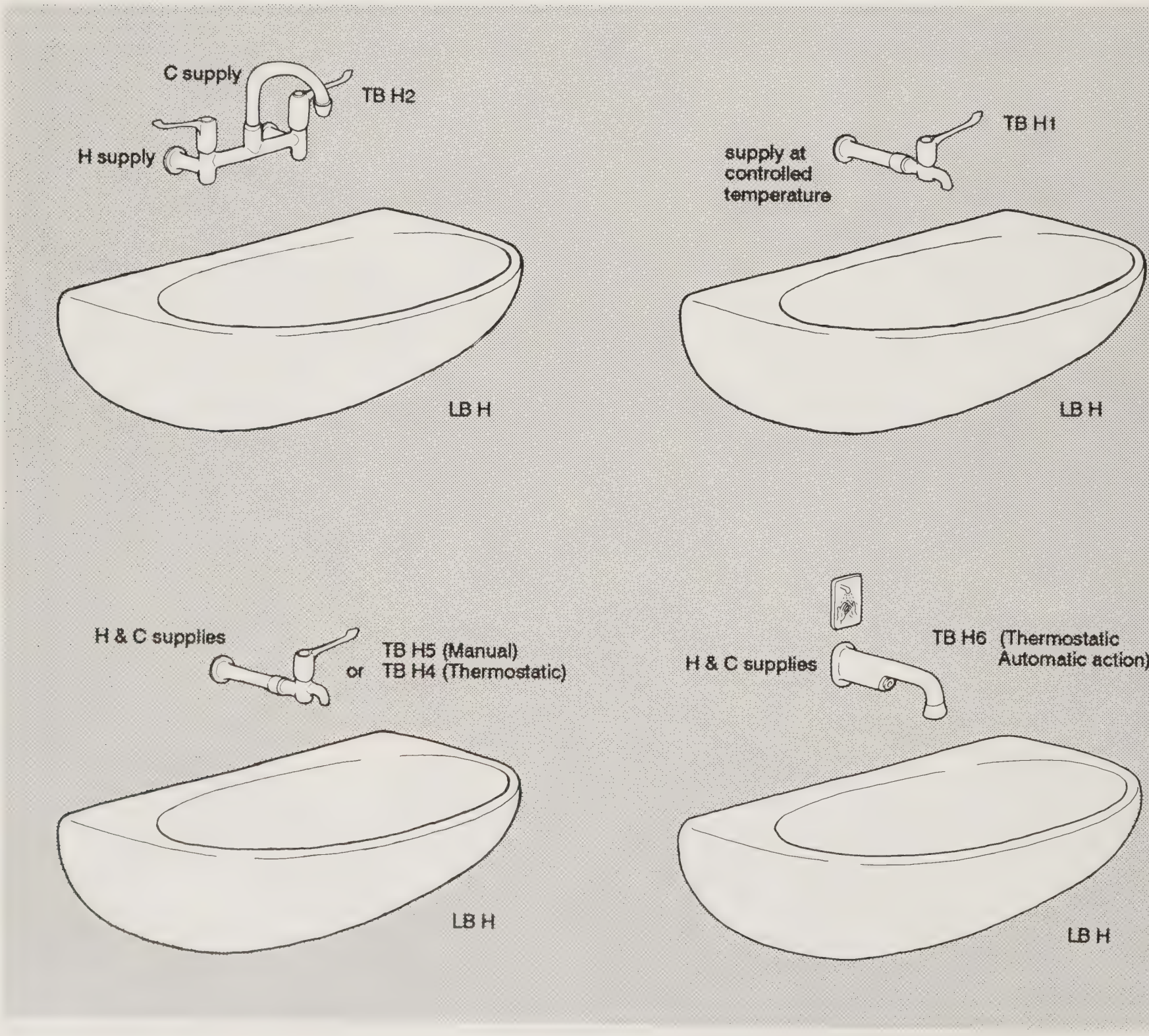
1. General Disposal Unit (including cistern).
2. Separate manual control of hot and cold water.
3. Combined or separate nozzles with flow straightener.
4. Rotating action taps.



Basin Assemblies for use in connection with medical/nursing procedures

The essential requirements are:—

1. Hospital Pattern Basin.
2. Washing under running water with flush operated waste (therefore no plug).
3. Hospital Pattern (lever action) tap(s) or automatically by proximity sensor switch to avoid contamination.
4. Single spout (may be spray or flow straightener nozzle, fixed or swivel).
5. Water temperature may be controlled thermostatically or manually.
6. Connecting to concealed services.

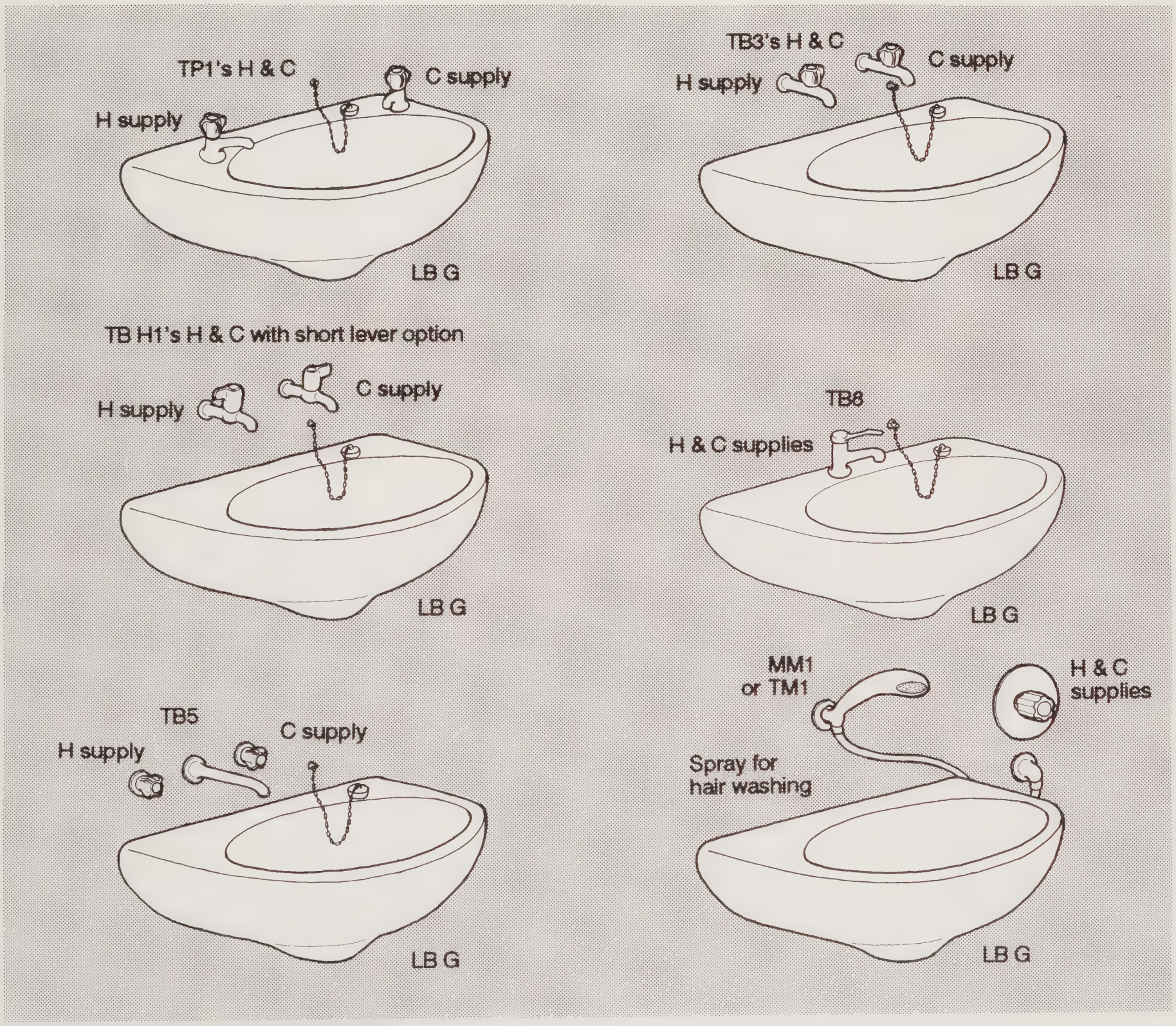


Basin Assemblies for use in connection with personal washing (face, forearms and hands etc)

The essential requirements are:—

1. General Basin.
2. Washing in reservoir of water (therefore a basin with plug).
3. Manual control of hot and cold water (except for hair washing assembly).
4. Combined or separate nozzle with flow straightener.
5. Rotating or lever action taps -

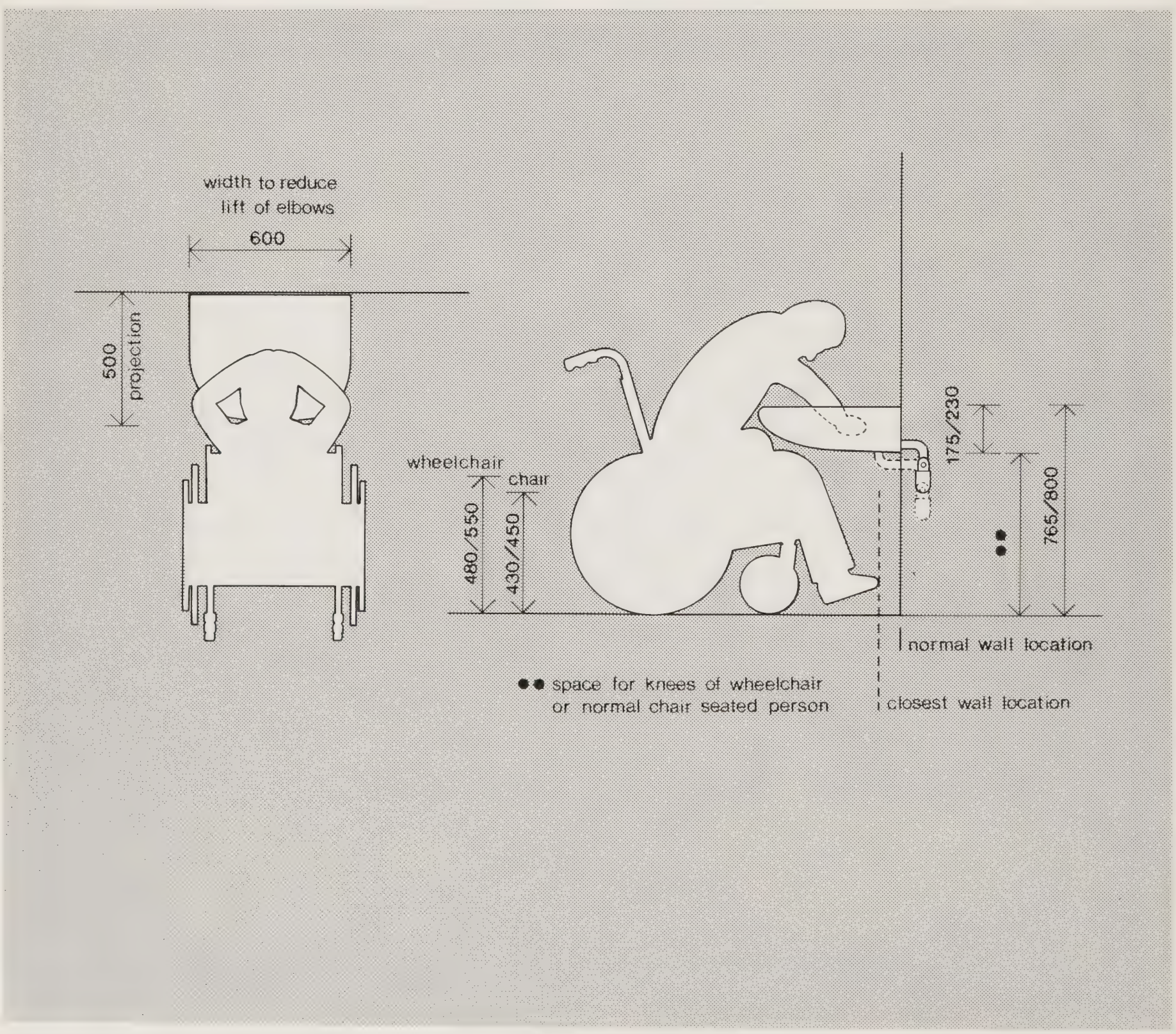
   (Note: when intended for use by handicapped users lever action taps may be preferred and basin should be set at special height: see basin assembly sheet for seated users).
6. All assemblies shown below are suitable with medium and large General Basins, except that for hair washing use only the large General Basin is suitable (and no plug is required).



Basin Assemblies for use in connection with personal washing by seated users

The essential requirements are:—

1. Space beneath bowl to accommodate knees
   of a person seated in a wheelchair (seat height 480/550)
   or on a normal chair (seat height 430/450).
   This can be achieved by using -
   a Large Hospital Pattern Basin with trap set in a duct
   or by using a Large Shallow General Basin with short exposed waste bend
   and with trap set in duct.
2. Lever action taps.

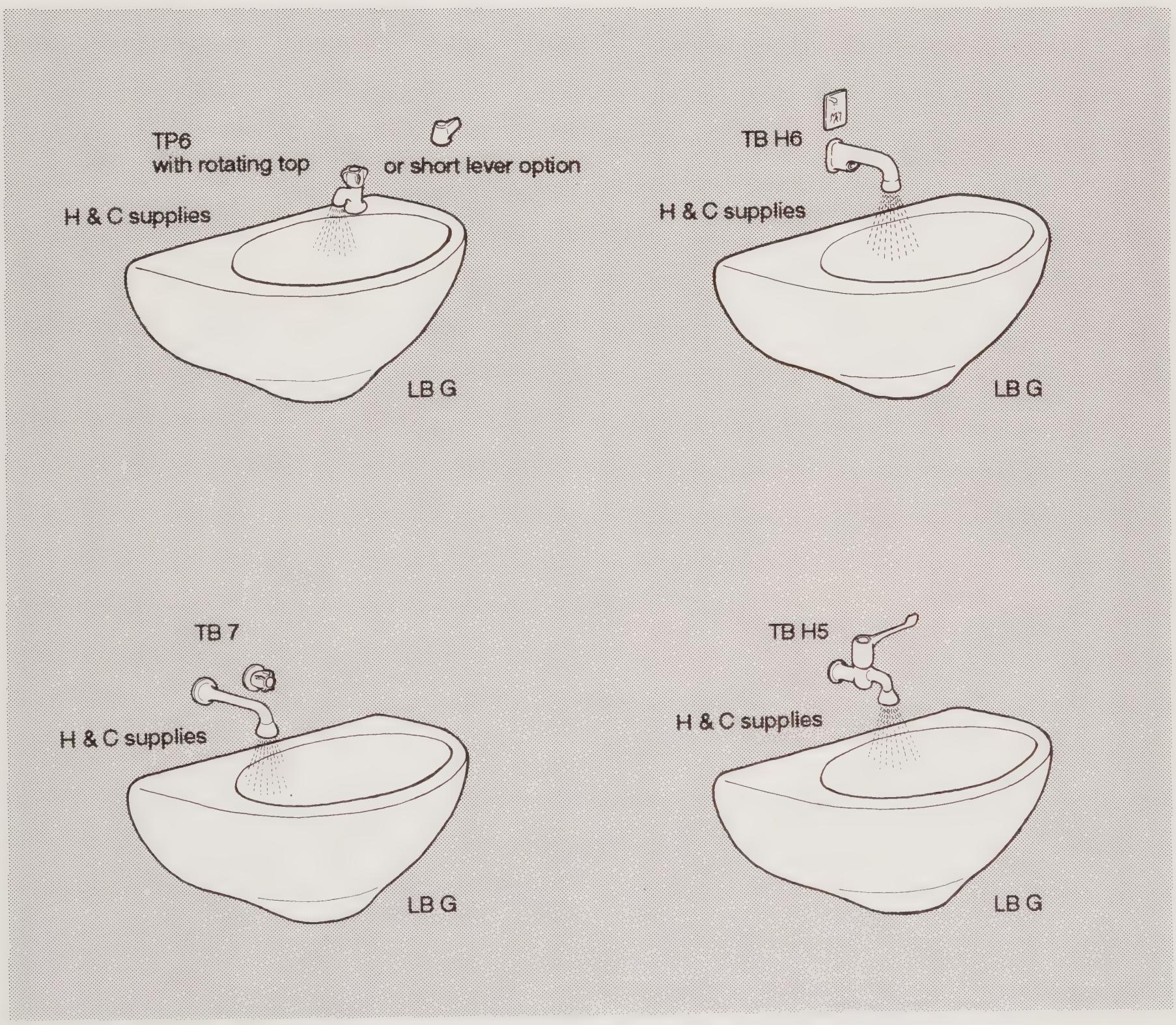


Basin Assemblies for hand rinsing only

The essential requirements are:—

1. General Basin.
2. Washing under running water (therefore no plug).
3. Hand wash only, therefore small or medium basins.
4. Combined manual control of flow and temperature of water or automatic control of thermostatically mixed water.
5. Single flow spout with spray nozzle.
6. Rotating action taps or activated by proximity sensor.

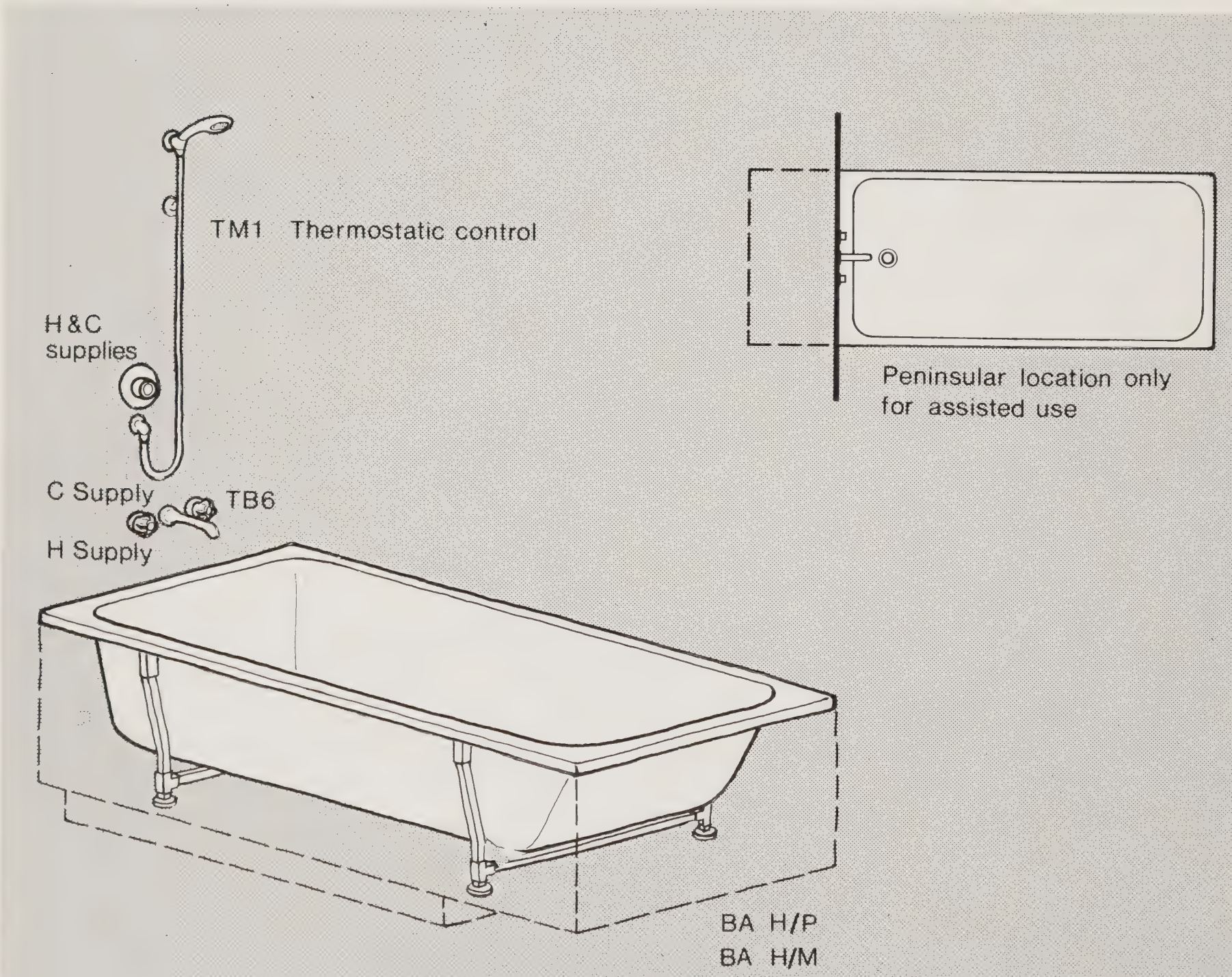
   (Note: when intended for use by handicapped users lever action taps or automatic control may be preferred and basin should be set at special height: see basin assembly sheet for seated users).



Bath Assembly for use in connection with assisted bathing by nursing staff

The essential requirements are:—

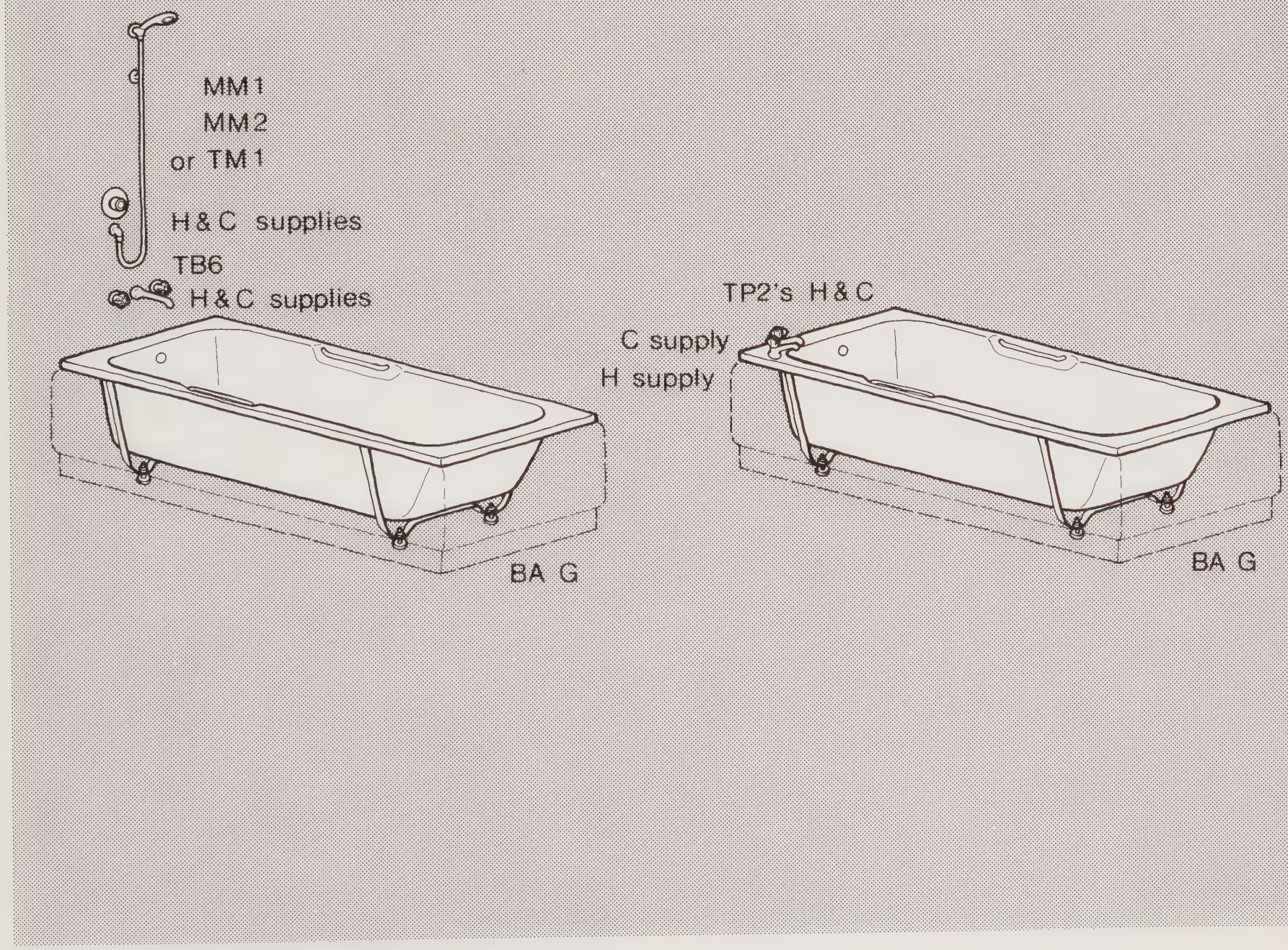
1. Hospital Pattern Metal or Plastics Bath.
2. Separate manual control of hot and cold water.
3. Single flow fixed nozzle with flow straightener.
4. Connecting to concealed services.
5. Optional addition – Thermostatic Shower Mixer with flexible hose and handset spray. (Note: auto retractable hose to negate immersion in bath water).
6. Side and end panels with recessed plinths to permit use of patient hoist.



Bath Assembly for use in connection with personal bathing by patients and/or staff.

The essential requirements are:-

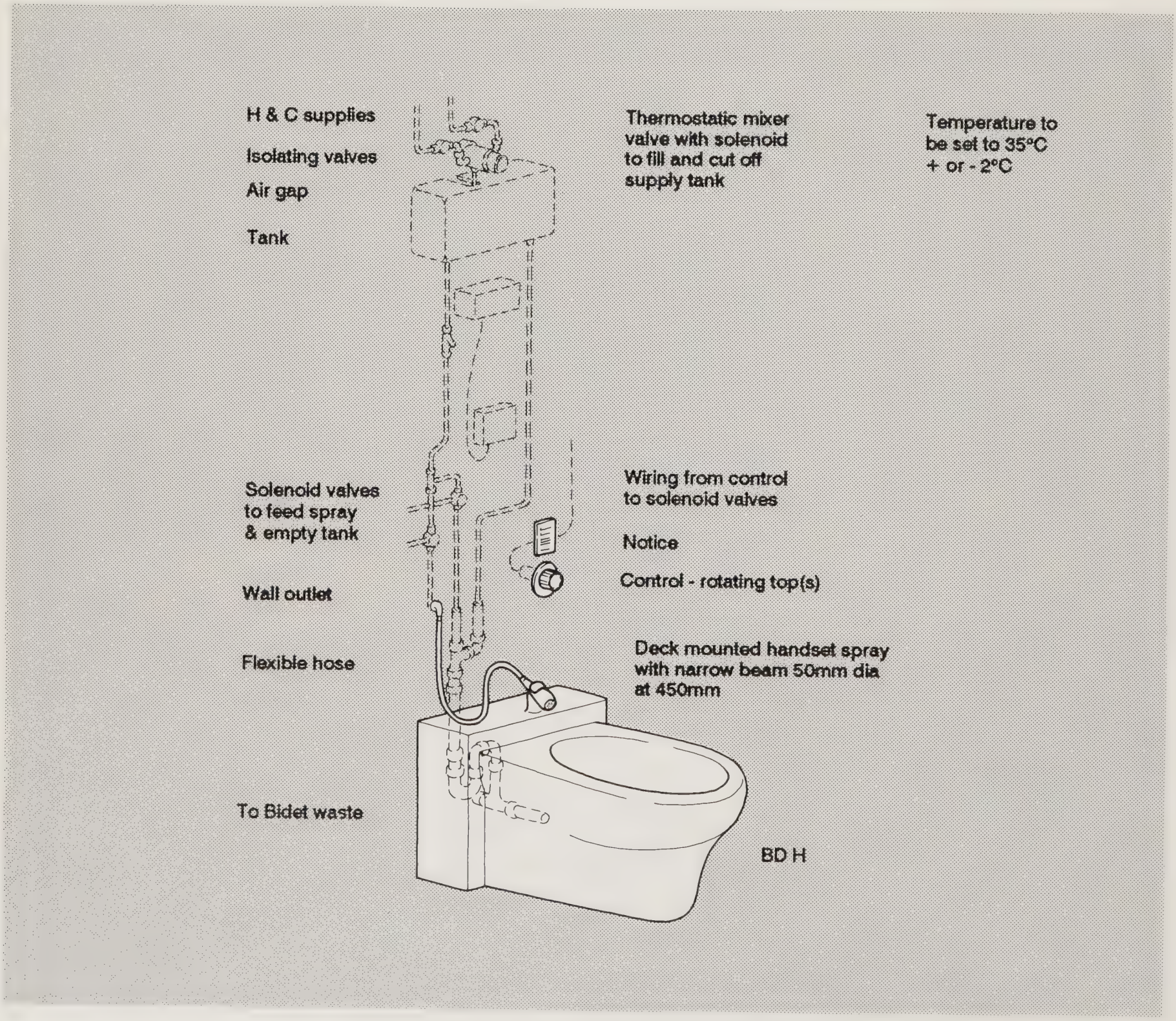
1. General Bath.
2. Hospital pattern bath is preferred for clinical areas.
3. Separate manual control of hot and cold water. Wall mounted taps are preferred in clinical areas.
4. Combined or separate nozzle(s) with flow straightener.
5. Optional addition – Shower mixer with fixed nozzle or flexible hose and handset spray. (Note: limit hose length to negate immersion in bath water).



Bidet Assembly for use in connection with medical/nursing procedures

The essential requirements are:—

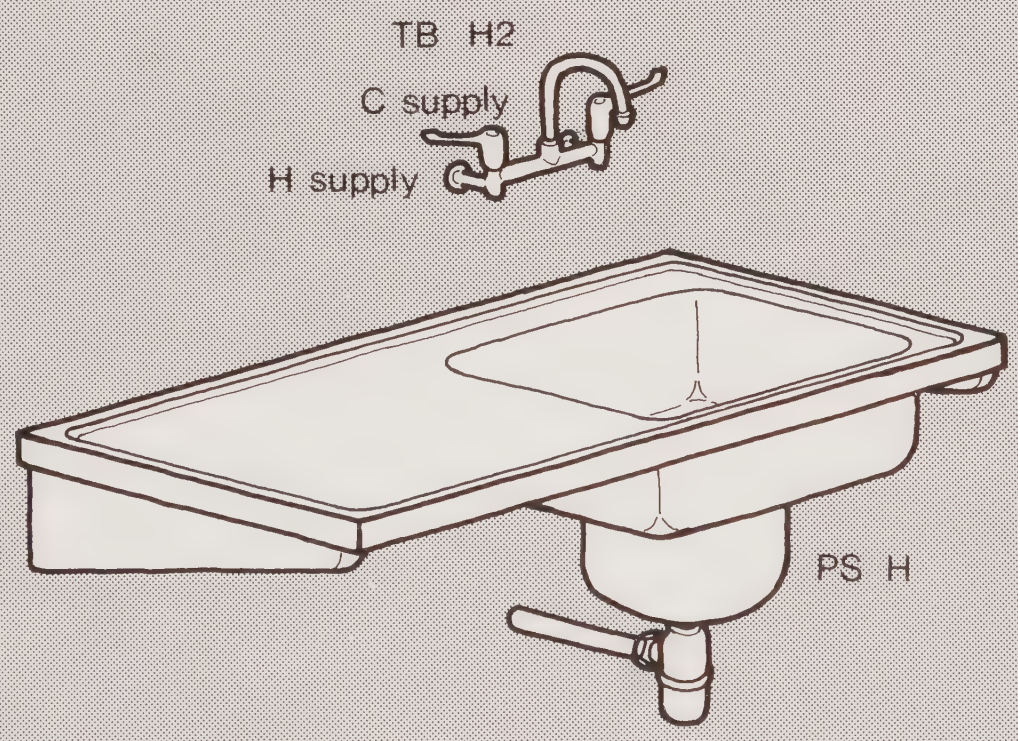
1. Hospital Pattern Bidet with flush grated waste (therefore no plug).
2. Shower mixer with flexible hose and handset spray deck mounted.
3. Water temperature thermostatically controlled.
4. Bidet break feed tank assembly to provide air break in the water supply to the bidet to prevent back siphonage and contamination of mains water.
5. Connecting to concealed services.


H & C supplies
Isolating valves
Air gap
Tank
Thermostatic mixer valve with solenoid to fill and cut off supply tank
Temperature to be set to 35°C + or - 2°C
Solenoid valves to feed spray & empty tank
Wall outlet
Flexible hose
To Bidet waste
Wiring from control to solenoid valves
Notice
Control - rotating top(s)
Deck mounted handset spray with narrow beam 50mm dia at 450mm
BD H

Plaster Sink Assembly for use in connection with plaster preparation

The essential requirements are:-

1. Hospital Pattern Plaster Sink.
2. Hospital Pattern (lever action) taps to avoid contamination.
3. Separate manual control of hot and cold water.
4. Single flow swivel nozzle with flow straightener.
5. Connecting to concealed services.



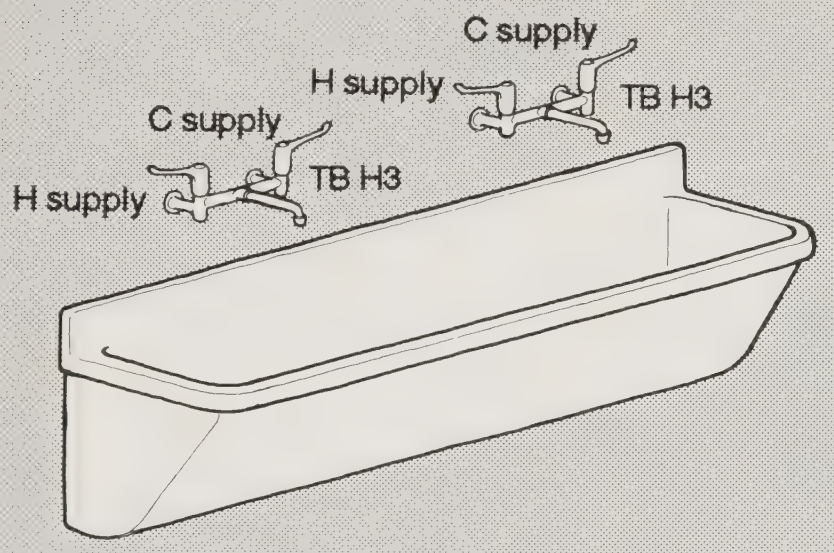
Scrub-up Trough Assemblies for use in connection with Surgical washing of forearms and hands

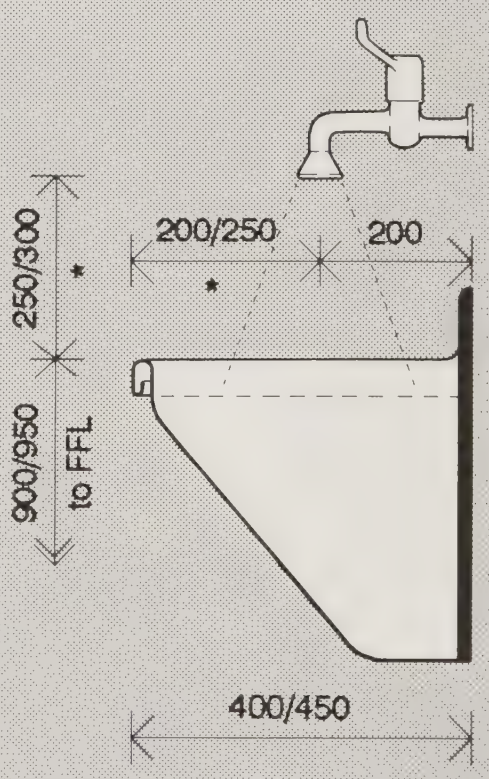
The essential requirements are:-

1. Hospital Pattern Scrub-up Trough.
2. Washing under running water (therefore no plug).
3. Hospital Pattern (lever action) tap(s) or automatically by proximity sensor switch.
4. Single flow nozzle (may be spray or flow straightener nozzle).
5. Water temperature may be controlled thermostatically or manually.
6. Connecting to concealed services.

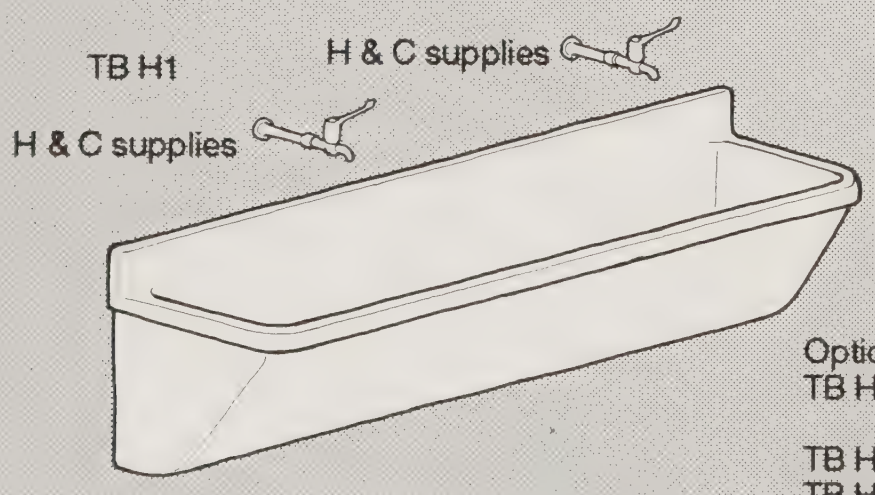
* The point of discharge relative to front rim of trough is critical to ensure:-

- No water discharge/spillage outside trough.
- Spray falls on to inclined surface of trough.
- Users are able to operate levers.
- Sufficient space for users to wash their hands and forearms.





TB H1 Temperature controlled mixed water



Optional

TB H4	Thermostatic controlled mixed water - manual control
TB H5	Manual control
TB H6	Thermostatic controlled mixed water - automatic action

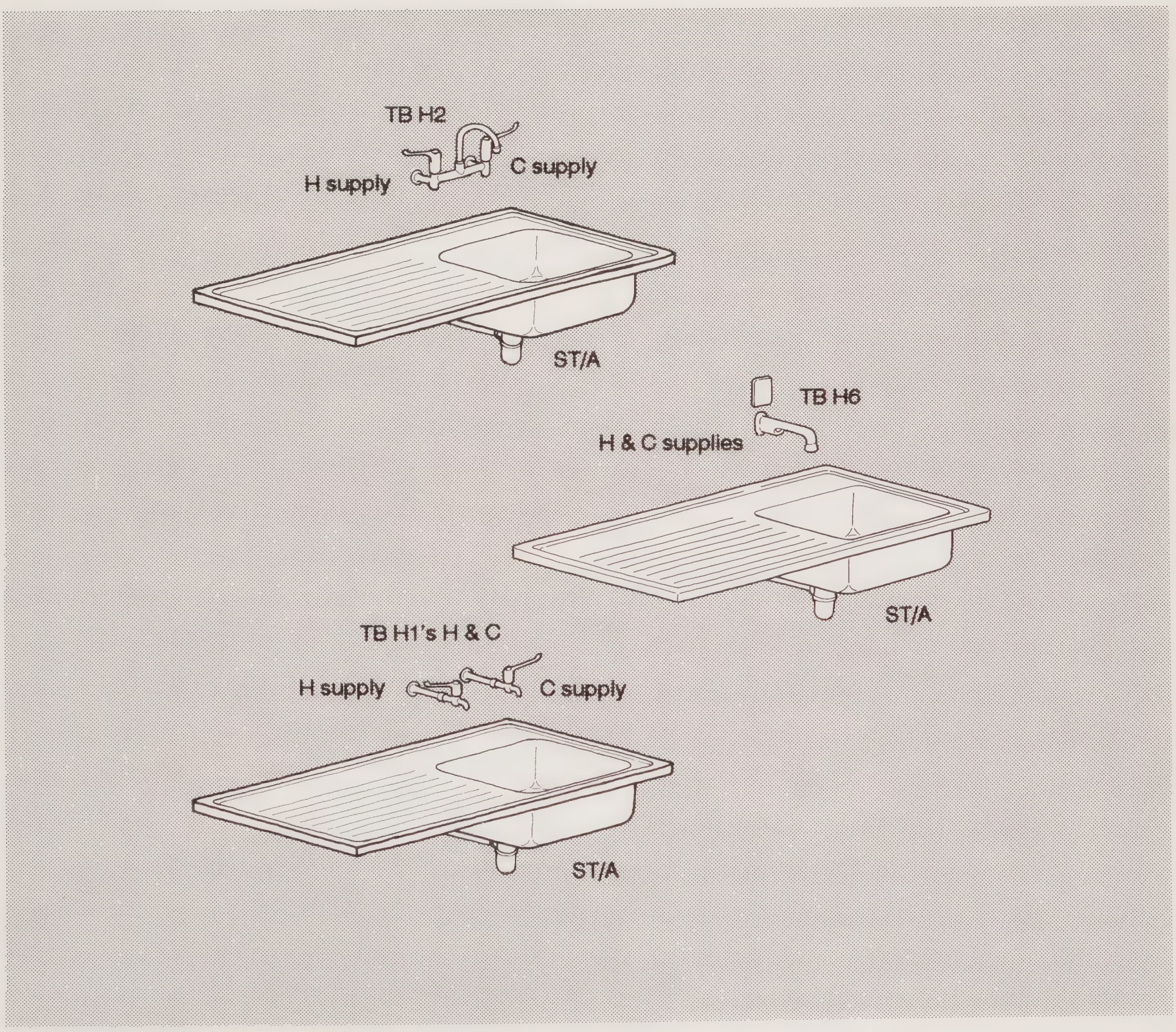
Sink and Sink Top Assemblies for use in connection with nursing procedures

The essential requirements are:-

1. Sink or Sink Tops.
2. Hospital Pattern taps(s): lever action or activated by proximity sensor.
3. Separate manual control of hot and cold water or automatic control of thermostatically mixed water.
4. Combined or separate nozzles with flow straighteners

   Note: preferred types are combined swivel nozzle with single flow or combined fixed nozzle with sensor control of single flow and spray.
5. Normally washing under running water (therefore flush grated waste with no plug).

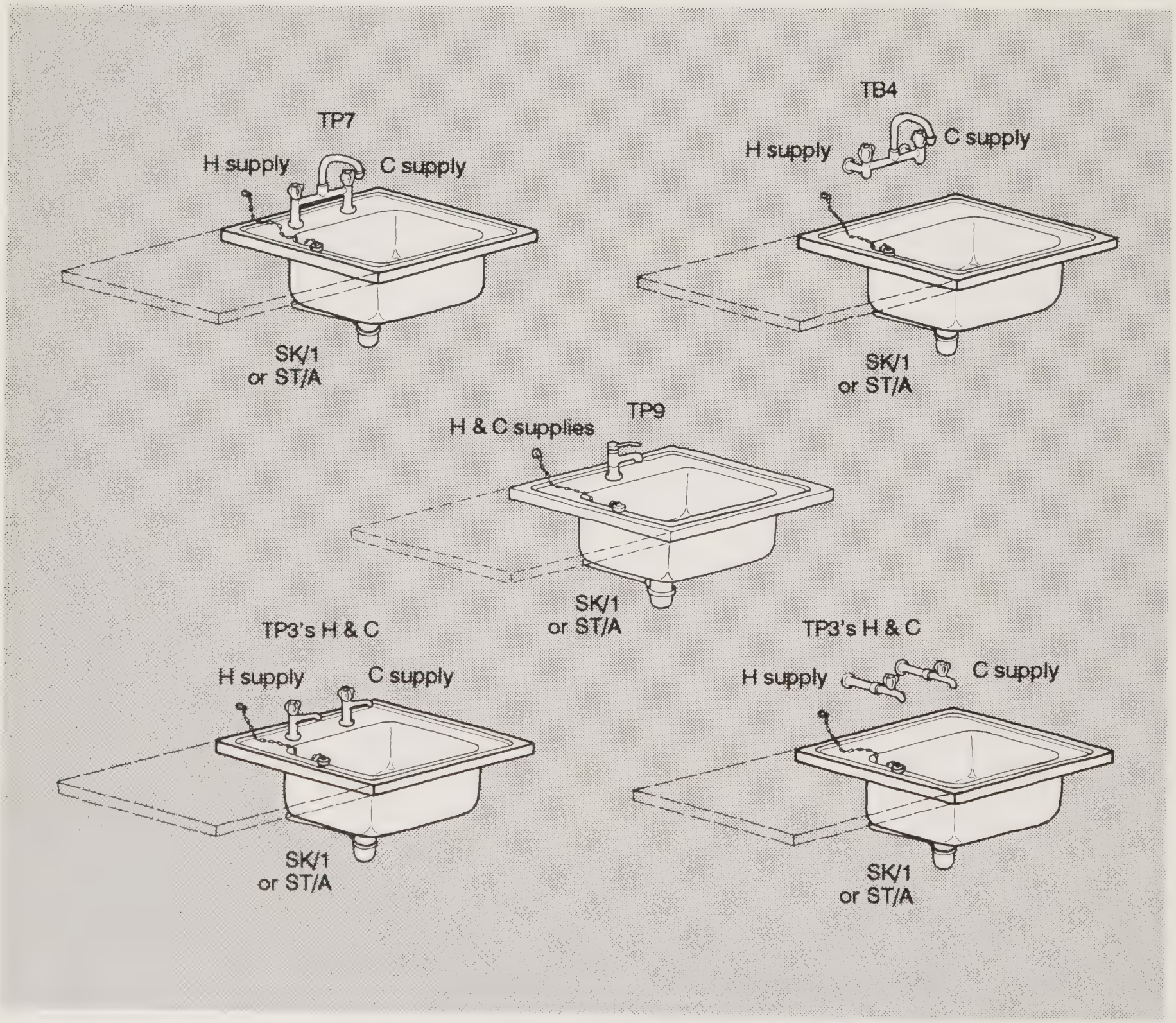
   Where a reservoir of water is required use recessed waste with plug.



Sink and Sink Top Assemblies for use in connection with domestic services procedures

The essential requirements are:-

1. Sink or Sink Top.
2. Washing in a reservoir of water (therefore a sink with plug).
3. Separate manual control of hot and cold water.
4. Combined or separate nozzle with flow straightener (combined swivel nozzle preferred).
5. Rotating or lever action taps.



4 Project documentation

4.1 Scheduling

Sanitary assemblies can be described and specified on a schedule prepared by the design team to supplement the information on the layout drawings.

The schedule, together with a list of products and manufacturers product literature, should be used:

- by the quantity surveyor to obtain a detailed specification for each item including the manufacturers name, and trade name and catalogue reference of the product
- by the main contractor for purchasing, sorting and installing on site
- by merchants for preparing their own purchasing and delivery lists.

The schedule and list of products should be completed and issued as appropriate to these functions, using the component references on the data sheets in 3.2 to identify the function and type of each appliance.

4.2 Product data

It is important that site staff should be provided with appropriate product information to enable them to carry out their supervisory role efficiently.

This could take the form of copies of illustrations of selected products taken from the manufacturers /merchants catalogues together with the schedule and list of products.

4.3 Bills of quantities

Having clearly identified the selected products in terms of manufacturers or merchants references on the list of products, and having measured and fully described them in the bills of quantities, it only remains to instruct the main contractor to procure them from named sources or from those of his choice.

In either case the aim should be to draw upon sources listed in the BSI Buyers Guide, and to control substitution of alternative products.

5 Site practice

5.1 Ordering and storage

Sanitary assemblies are made up of component parts which may originate from several sources. Most vitreous china and glazed fireclay ware

made in the UK originates from the West Midlands. Acrylic baths and shower trays, plumbers brassware, taps and fittings are made by a variety of firms some of which are associated companies of the ware manufacturers.

All ware manufacturers market their products exclusively through merchants. Some manufacturers of fittings and steel sinks will market direct to contractors but the most common form of supply is via plumbers merchants. A merchant may arrange to buy in components from several manufacturers and to assemble those components on his own premises.

Components should always be selected from manufacturers' or merchants' product ranges. The ordering of specials may involve delivery periods of several months and replacements may be difficult to obtain and expensive.

The main contractor should provide secure and weathertight storage and control.

5.2 Fixing and protection

All appliances must accept live loadings in use. This depends on the strength of the appliance, its fixing devices and the construction to which it is fixed. A load of 140 kg should be sustained by the assembly.

Back panels or spreader devices should be used when fixing basins, sinks or urinals to plasterboard or soft-plastered partitions. This is to ensure a firm fixing free from indentation from brackets or fixing plates.

For further information on fixings of sanitary appliances to back panels and panels to background support framing refer to sections 4.4 and 6.3 of HTM68 - Duct and panel assemblies - and to HTM70 - Fixings.

The use of wall mounted supply fittings should facilitate site installation of appliances and allow flexibility in programming.

Where appliances are mounted on flat surfaces of floors or walls a waterproof seal must be made at contact points.

Appliances and fittings should be delivered to site suitably protected and care must be taken to ensure that this is not removed prematurely. Further protection may be required to avoid marking of and damage to appliances before and after installation.

5.3 Preparation for handover

Arrangements should be made for the removal of all protective material at the latest possible stage prior to handover.

All assemblies, appliances and fittings should be tested for leaks, cleaned, inspected for damage and damaged parts replaced and left in perfect operating order before handover.

Manufacturers fixing and maintenance instructions should be included in a maintenance manual or passed to the maintenance staff. A clause to this effect should be included in the contract documentation.

References

Other HMSO publications

Health Technical Memoranda:

27 Cold water supply: storage and mains distribution

2040 The control of legionellae in healthcare premises.

Other DoH data

Activity data base

Health Building Note 40: Common Activity Spaces and other Health Building Notes

Nucleus hospitals.

Statutory legislation

Water Byelaws

Water Research Council Guide to Water Byelaws 1989

Byelaws of the Statutory Water Undertakers

Report by the Committee on Backsiphonage in Water Installations, 'The Bacteriological Examination of Water Supplies'.

IEE Wiring Regulations

National Building Specification

Section S12: Hot and Cold water

Section N13: Sanitary appliances/fittings

British Standard Specifications and Codes of Practice

BS 729	Hot dip galvanised coatings on iron and steel articles
BS 1010 Part 2	Draw off taps and stopvalves (screwdown pattern)
BS 1125	WC flushing cisterns
BS 1184	Copper and copper alloy traps
BS 1188	Ceramic wash basins and pedestals
BS 1189	Cast iron baths
BS 1206	Fireclay sinks
BS 1212 Part 2	Float operated valves (diaphragm type: brass body)
BS 1244 Part 2	Metal sinks for domestic use: Sit-on and inset sinks
BS 1254	WC seats (plastics)
BS 1344	Methods of testing vitreous enamel finishes
BS 1390	Sheet steel baths for domestic purposes
BS 1415 Part 1	Non-thermostatic, non-compensating mixing valves
Part 2	Thermostatic mixing valves
BS 1449 Part 2	Stainless steel plate
BS 1876	Automatic flushing cisterns for urinals

Index of Guidance Amendment No IGAN 13 (for internal use)

The following documents are cancelled by the contents of this document:–

CDB10:MDB4/1

BS 2456	Floats (plastics) for ballvalves for hot and cold water
BS 2871 Part 1	Copper tubes for water, gas and sanitation
BS 3380	Wastes and bath overflows
BS 3402	Quality of vitreous china sanitary appliances
BS 3468	Austenitic cast iron
BS 3605	Seamless and welded austenitic stainless steel pipes and tubes for pressure purposes
BS 3943	Plastic waste traps
BS 4305	Cast acrylic baths for domestic purposes
BS 4514	Unplasticized PVC soil and ventilating pipe, fittings and accessories
BS 4751	Sanitary wheelchairs
BS 5412	Performance of draw-off taps for water services
BS 5503	Vitreous china washdown WC pans with horizontal outlet
BS 5503 Part 3	Specification for WC pans with horizontal outlet for use with 7.5l maximum flush capacity cisterns.
BS 5504 Part 4	Specification for wall hung wc pans for use with 7.5l maximum flush capaicty cisterns.
BS 5505 Part 1	Pedestal bidets
BS 5505 Part 3	Vitreous china bidets over-rim supply only. Quality workmanship and functional dimensions other than connecting. dimensions.
BS 5520	Vitreous china bowl urinals
BS 5572	Code of Practice for sanitary pipework
BS 5627	Plastics connectors for use with horizontal outlet vitreous china WC pans
BS 6100	Section 2.7: Public Health, environmental engineering contains terminology on sanitary appliances
BS 6100	Section 3.3: Sanitation, contains terminology on sanitary appliances
BS 6340 Part 1	Guide on choice of shower units
Part 2	Specification for installation of shower units
Part 4	Shower heads

Part 5	Shower trays in acrylic material
Part 8	Shower trays in glazed ceramic material
BS 6465 Part 1	Code of practice for scale of provision, selection and installation of sanitary appliances
BS 7015	Cast acrylic sheet for baths and shower trays for domestic purposes.
BS 7357	Specification for 7.5l wc flushing cisterns.
BS 7358	Specification for closed coupled suites with flush capacity of 7.5l maximum.
BS EN 200	Sanitary tap ware. General technical specifications for single taps and mixer taps (nom. size ½") PN 10. Minimum flow pressure of 0.05 MPa (0.5 bar).
BS EN 232	Baths. Connecting dimensions.
BS EN 246	Sanitary tapware. General specifications for flow rate regulators
BS EN 248	Sanitary taps: general technical specifications for electro deposited nickel chrome coatings
BS EN 251	Shower trays. Connecting dimensions.
BS EN 274	Sanitary Tapware - waste fittings for basins, bidets and baths. General technical specifications.

BSI Buyers Guide

Other publications

Water Research Council – Materials and fittings directory.

Other publications in this series

(Given below are details of all Health Technical Memoranda available from HMSO. HTMs marked (*) are currently being revised, those marked (†) are out of print. Some HTMs in preparation at the time of publication of this HTM are also listed.)

1. Anti-static precautions: rubber, plastics and fabrics†
2 Anti-static precautions: flooring in anaesthetising areas (and data processing rooms), 1977.
3 –
4 –
5 Steam boiler plant instrumentation†
6 Protection of condensate systems: filming amines†
2007 Electrical services: supply and distribution, 1993.
8 –
9 Pneumatic conveyor systems*
2010 Sterilizers, 1994.
2011 Emergency electrical services, 1993.
2015 Bedhead services, 1994.
16 –
17 Health building engineering installations: commissioning and associated activities, 1978./
18 Facsimile telegraphy: the transmission of pathology reports within a hospital – a case study†
2020 Electrical safety code for low voltage systems, 1993.
2021 Electrical safety code for high voltage systems, 1993, 1994
2022 Medical gas pipeline systems, 1994.
2023 Access and accommodation for engineering services*
2025 Ventilation in healthcare premises, 1994.
26 Commissioning of oil, gas and dual fired boilers: with notes on design, operation and maintenance†
27 Hot and cold water supply, storage and mains services*
28 to 39 –
2040 The control of legionellae in healthcare premises – a code of practice, 1993.
41 to 49 –
2050 Risk assessment in the NHS estate, 1994.
51 to 53 –
2055 Telecommunications (telephone exchanges), 1994.

Component Data Base (HTMs 54 to 70)

54.1 User manual, 1993.
55 Windows, 1989.
56 Partitions, 1989.
57 Internal glazing, 1994.
58 Internal doorsets, 1989.
59 Ironmongery, 1989.
60 Ceilings, 1989.
61 Flooring*
62 Demountable storage systems, 1989.
63 Fitted storage systems, 1989.
65 Health signs*
66 Cubicle curtain track, 1989.
67 Laboratory fitting-out system, 1993.
68 Ducts and panel assemblies, 1993.
69 Protection, 1993.
70 Fixings, 1993.
71 Materials Management Modular Storage.
72 to 80

Firecode

81 Firecode: fire precautions in new hospitals*
81 Supp 1 1993.
82 Firecode: alarm and detection systems, 1989.
83 Fire safety in healthcare premises: general fire precautions, 1994.
85 Firecode: fire precautions in existing hospitals, 1994.
86 Firecode: fire risk assessment in existing hospitals, 1994.
87 Firecode: textiles and furniture, 1993.
88 Fire safety in health care premises: guide to fire precautions in NHS housing in the community for mentally handicapped/ill people, 1986.

New HTMs in preparation

2024 Lifts
2030 Washers for sterile production

Health Technical Memoranda published by HMSO can be purchased from HMSO bookshops in London (post orders to PO Box 276, SW8 5DT), Edinburgh, Belfast, Manchester, Birmingham and Bristol, or through good booksellers. HMSO provide a copy service for publications which are out of print; and a standing order service.

Enquiries about Health Technical memoranda (but not orders) should be addressed to: NHS Estates, Department of Health, Marketing and Publications Unit, 1 Trevelyan Square, Boar Lane, Leeds LS1 6AE.

About NHS Estates

NHS Estates is an Executive Agency of the Department of Health and is involved with all aspects of health estate management, development and maintenance. The Agency has a dynamic fund of knowledge which it has acquired during 30 years of working in the field. Using this knowledge NHS Estates has developed products which are unique in range and depth. These are described below. NHS Estates also makes its experience available to the field through its consultancy services.

Enquiries about NHS Estates should be addressed to: NHS Estates, Marketing and Publications Unit, Department of Health, 1 Trevelyan Square, Boar Lane, Leeds LS1 6AE. Telephone 0113 254 7000.

Some other NHS Estates products

Activity DataBase – a computerised system for defining the activities which have to be accommodated in spaces within health buildings. NHS Estates.

Design Guides – complementary to Health Building Notes, Design Guides provide advice for planners and designers about subjects not appropriate to the Health Building Notes series. HMSO

Estatecode – user manual for managing a health estate. Includes a recommend methodology for property appraisal and provides a basis for integration for the estate into corporate business planning. HMSO

Concode – outlines proven methods of selecting contracts and commissioning consultants. Reflects official policy on contract procedures. HMSO

Works Information Management System – a computerised information system for estate management tasks, enabling tangible assets to be put into the context of servicing requirements. NHS Estates.

Health Building Notes – advice for project teams procuring new buildings and adapting or extending existing buildings. HMSO

Health Guidance Notes – an occasional series of publications which respond to changes in Department of Health policy or reflect changing NHS operational management. Each deals with a specific topic and is complementary to a related HTM. HMSO

Health Technical Memoranda – guidance on the design, installation and running of specialised building service systems, and on specialised building components. HMSO

Health Facilities Notes – debate current and topical issues of concern across all areas of healthcare provision. HMSO

Encode – shows how to plan and implement a policy of energy efficiency in a building. HMSO

Firecode – for policy, technical guidance and specialist aspects of fire precautions. HMSO

Concise – software support for managing the capital programme. Compatible with Capricode. NHS Estates

Model Engineering Specifications – comprehensive advice used in briefing consultants, contractors and suppliers of healthcare engineering service to meet Departmental policy and best practice guidance. NHS Estates

Quarterly Briefing – gives a regular overview on the construction industry and an outlook on how this may affect building projects in the health sector, in particular the impact on business prices. Also provides information on new and revised cost allowances for health buildings. Published four times a year; available on subscription direct form NHS Estates. NHS Estates

Items noted "HMSO" can be purchased from HMSO Bookshops in London (post orders to PO Box 276, SW8 5DT), Edinburgh, Belfast, Manchester, Birmingham and Bristol or through good booksellers.

NHS Estates consultancy service

Designed to meet a range of needs from advice on the oversight of estates management functions to a much fuller collaboration for particularly innovative or exemplary projects.

Enquiries should be addressed to: NHS Estates Consultancy Service (address as above).

Printed in the United Kingdom for HMSO.
Dd.0300786, 8/95, C12, 3400, 5673, 315158.

NHS Estates
An Executive Agency of the Department of Health

Department of Health
1 Trevelyan Square
Boar Lane
Leeds
LS1 6AE
Fax 0113 254 7299
Telephone 0113 254 7000

Dear Customer

OLD

At NHS Estates, we constantly strive to produce publications that are relevant to the demands of the NHS and our worldwide healthcare customers.

It would help us to provide you with a better service if you could set aside a few minutes to complete the questionnaire on the reverse, fold as shown and return in a window envelope.

Win a free Health Building Note of your choice.

As a token of appreciation for taking the time to complete this card, all cards will be placed into an annual draw. The winning entry will receive a free Health Building Note of their choice.

Thank you for your comments.

John Locke
Chief Executive

There are no cash alternatives to the prize offered.

OLD

JOHN LOCKE
CHIEF EXECUTIVE
NHS ESTATES
FREEPOST LS 5588
LEEDS
LS1 1YY

Publication title ..... Date .....

Reader details

Name .....

Position .....

Organisation .....

Address .....

..... Postcode .....

Telephone .....

Please tick the appropriate box

	Very Good	Good	Fair	Poor
Appropriateness of subject	❑	❑	❑	❑
Met my need	❑	❑	❑	❑
Clarity of presentation	❑	❑	❑	❑
Quality of content	❑	❑	❑	❑
Value for money	❑	❑	❑	❑
Overall rating of the publication	❑	❑	❑	❑

Will you be purchasing further editions in the series? YES ❑ NO ❑

Other comments / areas for improvement?

.....

.....

Do you have any suggested subjects for the future?

.....

.....

Do you receive copies of our quarterly Newslink newsletter? YES ❑ NO ❑

Do you wish to receive a copy? YES ❑ NO ❑

Have you purchased other products / services from us recently?

Please tick

Other publications ❑ **Activity DataBase** ❑

Consultancy services ❑ **Wims Software Enhancements** ❑

Other software products ❑ **Other: Please specify** ❑

Are there other ways NHS Estates can assist you?

.....

.....

.....

How did you receive your copy?

Sent/Issued by NHSE ❑ **Purchased from HMSO** ❑

HMSO

Published by HMSO and available from:

HMSO Publications Centre
(Mail, fax and telephone orders only)
PO Box 276, London, SW8 5DT
Telephone orders 0171-873 9090
General enquiries 0171-873 0011
(queuing system in operation for both numbers)
Fax orders 0171-873 8200

HMSO Bookshops
49 High Holborn, London, WC1V 6HB
(counter service only)
0171-873 0011 Fax 0171-831 1326
68–69 Bull Street, Birmingham B4 6AD
0121-236 9696 Fax 0121-236 9699
33 Wine Street, Bristol, BS1 2BQ
0117 9264306 Fax 0117 9294515
9-21 Princess Street, Manchester, M60 8AS
0161-834 7201 Fax 0161-833 0634
16 Arthur Street, Belfast, BT1 4GD
01232 238451 Fax 01232 235401
71 Lothian Road, Edinburgh, EH3 9AZ
0131-228 4181 Fax 0131-229 2734
The HMSO Oriel Bookshop
The Friary, Cardiff CF1 4AA
01222 395548 Fax 01222 384347

HMSO's Accredited Agents
(see Yellow Pages)

and through good booksellers

HMSO G

ISBN 0-11-321762-5

9 780113 217625